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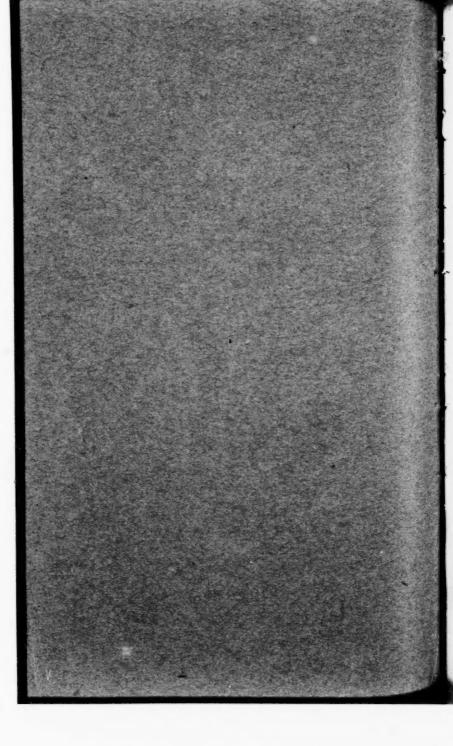
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# (31,464)

# SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1925

# No. 741

PUBLIC UTILITIES COMMISSION OF RHODE ISLAND AND NARRAGANSETT ELECTRIC LIGHTING COM-PANY, PETITIONERS,

vs.

### ATTLEBORO STEAM & ELECTRIC COMPANY

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF THE STATE OF RHODE ISLAND

#### INDEX

|   | Page |
|---|------|
| Proceedings in supreme court of Rhode Island  | 1    |
| Exhibits in Evidence—Opinion of Judge Brown in United States district                         |      |
| court, February 12, 1924, in Attleboro Steam &  |      |
| Electric Company vs, Narragansett Electric  |      |
| Lighting Company  | 1    |
| Letter from president Narragansett Electric<br>Lighting Company to the Public Utilities Com-  |      |
| mission, dated May 7, 1924  | 23   |
| Notice of investigation, dated May 7, 1924  | 27   |
| Copy of advertisement in regard to public hearing   |      |
| to be held Monday, May 26, 1924   | 35   |
| Letter from R. G. Dodge, attorney for Attleboro<br>Company, to Narragansett Electric Lighting |      |
| Company, dated May 9, 1924  | 36   |
| Letter from Narragansett Electric Lighting Com-   |      |
| pany to Public Utilities Commission, dated May  |      |
| 21, 1924  | 38   |
|   |      |

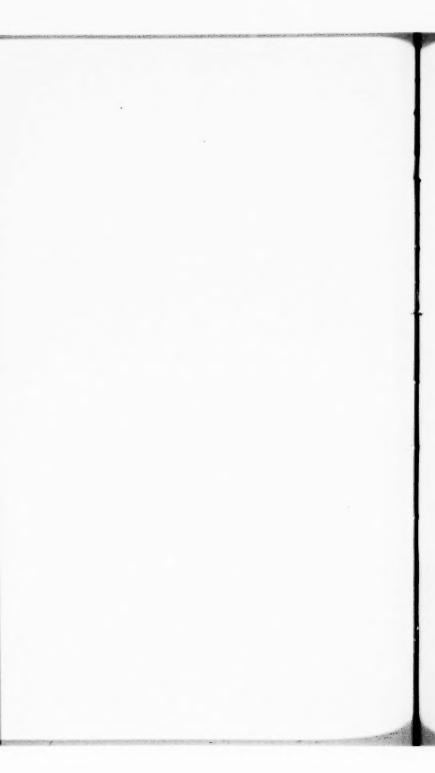
| Exhibits in Evidence—Tariff R. I. P. U. C. No. 125, Narragansett Elec-<br>tric Lighting Company, rate N, with order at-<br>tached | 40<br>43<br>45<br>47 |
|---|----------------------|
| tric Lighting Company, rate N, with order at-<br>tached   | 43<br>45             |
| Order No. 835½, dated June 2, 1924<br>Letter from Jesse E. Gray, assistant secretary  | 43<br>45             |
| Order No. 8354, dated June 2, 1924<br>Letter from Jesse E. Gray, assistant secretary  | 45                   |
| Letter from Jesse E. Gray, assistant secretary  |                      |
|   |                      |
| Narragansett Electric Lighting Company, dated   |                      |
| July 10, 1924   | 47                   |
| Propositions before Public Utilities Commission of Rhode Island and   | 47                   |
| Providence Plantations  |                      |
| Assessment of course  | 47                   |
| Argument of counsel   | 47                   |
| Appearances of counsel  | 501                  |
| Statement of Chairman Bliss   | 50                   |
| Appearances of counsel  | 51                   |
| Agrament of counsel   | 51                   |
| Testimony of Jesse E. Gray  | 61                   |
| Francis J. Stanwood   | 122                  |
| Thomas C. Fales   | 136                  |
| Jesse E. Gray (recalled)  | 142                  |
| Collegny between Commission and counsel   | 152                  |
| Tostimony of Jesse E. Gray (recalled)   | 153                  |
| Franklin L. Hall  | 174                  |
| F. J. Stanwood (recalled)   | 170                  |
| Argument of counsel   | 188                  |
| Exhibit No. 1 in Evidence—Basis for Schedule R. I. P. U. C. No. 125.  |                      |
| Letter attached to exhibit from Narragansett Company to Attle-  |                      |
| boro Company dated May 21, 1924   | 69 (91)              |
| Exhibit No. 2 in Evidence—Result of selling electricity under   |                      |
| Schoolule No 68   | 24                   |
| Exhibit No. 3 in Evidence—Rate Schedule R. I. P. U. C. No. 120  | 251                  |
| Exhibit No. 4 in Evidence—Letter from Narragansett Electric Light-  |                      |
| ing Company to Public Utilities Commission, dated May 14, 1917.   | 256                  |
| Exhibit No. 5 in Evidence—Agreement between Narragansett Elec-  |                      |
| trie Lighting Company, Attleboro Steam & Electric Company, and  |                      |
| Sockank Flortric Company, dated May 8, 1917   | 256                  |
| Exhibit No. 6 in Evidence—Rate Schedule R. I. P. U. C. No. 68   | 27                   |
| Exhibit No. 7 in Evidence—Annual report and statement of Nar-   |                      |
| ragansett Electric Lighting Company for year ending December  |                      |
| 31, 1923  | 27                   |
| Exhibit No. 8 in Evidence—Peak load carried by station with two   | 4767                 |
| turbines out of commission  | 5363                 |
| Exhibit No. 9 in Evidence—Highest peak load in each month   | 341                  |
| Exhibit No. 10 in Evidence—Loss to the Narragansett Company   | 641                  |
| under Rate Schedule R. I. P. U. C. No. 68   | 311                  |
| Exhibit No. 11 in Evidence—Various graphs showing costs   | 33                   |
| Exhibit No. 12 in Evidence—Trend of electrical construction costs.  | 20.1                 |
| Exhibit No. 13 in Evidence—Boiler and turbine costs   | 34                   |
| Defendant's requested findings  | 34                   |
| Motion of Attleboro Steam & Electric Co, for requested findings   | 125                  |
| Requested findings of Attleboro Steam & Electric Co   | 34                   |

| INDEX  | 111  |
|--|------|
|  | Page |
| Brief of Narragansett Electric Lighting Co                                 | 359  |
| Order re tariff  | 383  |
| Decision and order of Commission   | 385  |
| Summary of proceedings   | 421  |
| Petition for appeal and assignments of error                               | 499  |
| Summons and sheriff's return   | 428  |
| Appearance of counsel  | 429  |
| Motion that appeal shall not act as stay of order of Public Utilities Com- | -    |
| mission  | 430  |
| Motion for emergency order to prevent petition for appeal as acting as     |      |
| a stay   | 434  |
| Stipulation re motion that appeal shall not act as a stay                  | 437  |
| Opinion, Stearns, J  | 438  |
| Final decree   | 448  |

450

Clerk's certificate.....

Order allowing certiorari.....



# District Court of the United States 1

DISTRICT OF RHODE ISLAND

ATTLEBORO STEAM AND ELECTRIC COMPANY

17.

NARRAGANSETT ELECTRIC LIGHTING COMPANY.

Equity No. 173

### Opinion.

February 12, 1924.

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Brown, J.—This is a bill in equity brought by the Attleboro Steam and Electric Company, a Massachusetts Corporation, against the Narragan-sett Electric Lighting Company, a Rhode Island Corporation, to enjoin the Defendant from cutting off the Plaintiff's supply of electrical energy so long as the Plaintiff conforms to the terms of a written contract dated May 8, 1917, whereby the Defendant undertook to sell and deliver to the Plaintiff during a term of twenty years all the electrical energy to be supplied by the Attleboro Company to its customers in Attleboro, Massachusetts.

The bill alleges that the Plaintiff has no generating plant and is unable to obtain from any source, other than the Defendant, any substantial supply of electrical energy, and that if the Defendant's threat to cut off Plaintiff's supply of electrical energy should be carried out, the City of Attle-

### Opinion

boro would be deprived of electrical energy and power to the incalculable damage of the Plaintiff and of the citizens of Attleboro.

The principal dispute between the parties arises from the demand by the Narragansett Company for an increased charge for electrical energy.

The Plaintiff insists that the rate fixed by the contract of May 8, 1917 and approved by the Public Utilities Commission of the State of Rhode Island, is still in force. This rate is shown in scheduldescribed as R. I. P. U. C. No. 68 (Exhibit 2 in the present case).

The Defendant contends that this Contract rate has been superseded by a new schedule of rates, applicable to this contract alone, filed on April 6, 1921 with the Public Utilities Commission and by its order of April 27, 1921, put in effect as R. I. P. U. C. No. 101 (Exhibit 4 in the present case).

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As the Rhode Island "Public Utilities Act", Public Laws 1912, Chapter 795, was in force before the making of the contract of May 8, 1917, and as the Narragansett Electric Lighting Company was within the term "public utility" as defined by that act, the Attleboro Company had full notice that it was dealing with a Rhode Island Corporation of limited power to contract, and subject to continuous regulation in the public interest through an administrative legislative agent, the Public Utilities Commission.

The Plaintiff contends that the contract of May, 1917 relates to interstate commerce and that the Rhode Island statute affecting public utilities was intended to regulate only the rights of residents of Rhode Island with respect to service rendered in that state.

As it is apparent that losses upon contracts for the delivery of electrical energy for use outside the state might affect the financial ability of the Narragansett Company to render service in Rhode Island at reasonable rates and that there might thus result a discrimination in rates which would he unfavorable to residents of Rhode Island and favorable to the residents of Massachusetts engaged in the same lines of industry, we should be reluctant to accept the contention that though the corporate capacity of the Narragansett Company to contract with citizens of Rhode Island is plainly limited and subject to legislative control through the Public Utilities Commission, yet in making contracts with corporations or citizens of contiguous or remote states for the supply of electricity generated in Rhode Island, it is free from such control.

One who deals with a corporation whether he be a citizen of the same or another state is chargeable with knowledge of its corporate power, and of any statutory limitation upon, or reservation of legislative control over, its exercise of corporate powers granted by the state of its creation.

Without further discussion of the question whether or not the contract relates to interstate commerce and whether the acts of the Public Utilities Commission relevant to the present case are invalid as an attempt to fix rates for interstate commerce, we may assume for the purposes of this case that we have to deal with a contract made by the defendant with a Rhode Island Corporation whose contractual powers were limited and subject to continuous regulation by the Public Utilities Commis-

### Opinion

sion of Rhode Island, at least in the absence of any attempt by Congress to act under its power to regulate interstate commerce.

See Pennsylvania Gas Company v. Public Utili-

ties Commission, 252 U.S., 23, 29, 31.

The principal question in this case is what effect upon a special rate formerly established by contract between the parties and approved by the Public Utilities Commission of Rhode Island, is to result from the following proceedings before the Public Utilities Commission.

## NARRAGANSETT ELECTRIC LIGHTING COMPANY EXECUTIVE OFFICES

### TURKS HEAD BUILDING PROVIDENCE, R. I.

Public Utilities Commission, State of Rhode Island.

#### Gentlemen:

We are filing herewith R. I. P. U. C. No. 101, cancelling R. I. P. U. C. No. 68 for the purpose of increasing the rate paid by the Attleboro Steam and Electric Company for electricity.

We respectfully request that you waive the statutory notice and allow this rate to become effective on all electricity billed on and after April 1, 1921.

Very truly yours,

(Signed) E. A. BARROWS, President.

STAMPED.

RECEIVED

April 6, 1921

PUBLIC UTILITIES COMMISSION
STATE OF RHODE ISLAND

### STAMPED

In Regular Session
Public Utilities Commission 15
April 27, 1921
Consent Granted
Order No. 584
G. A. Carmichael,
Secy.

A true copy.

Attest:

(Sgd) George A. Carmichael, Secretary.

# R. I. P. U. C. No. 101 Cancelling R. I. P. U. C. No. 68

# NARRAGANSETT ELECTRIC LIGHTING COMPANY

# Special rate to Attleboro Steam and Electric Company

### CHARACTER OF SERVICE

Electricity to be delivered to the Attleboro Company at the East Providence sub-station of the Narragansett Company or at such other point or points as may be mutually agreed upon by the parties at 22,000 or other agreed voltage. Said electricity to be in the form of three phase sixty cycles, alternating current.

#### CONDITIONS

The Attleboro Company to receive electricity at said East Providence Sub-Station and to bear all expense of transmitting the electricity thus received.

#### RATE

18

(a) A service charge of such amount as will equal the cost to the Narragansett Company of taxes, insurance, depreciation, obsolescence and any other fixed charges and net the Narragansett Company an eight per cent dividend upon that portion of the cost of the plant which can properly be allocated to the generation of electricity for and the delivery of such electricity to the Attleboro Company.

- (b) A charge per kilowatt hour for all electricity delivered which shall be equal to the cost per kilowatt hour to the Narragansett Company of generating and delivering such electricity to the Attleboro Company at said point of delivery plus a fixed addition thereto of 1 mill per kilowatt hour.
- (c) A charge equal to any and all taxes paid by the Narragansett Company on account of or having relation to the electricity generated for or sold or delivered to the Attleboro Company or any payments receivable or received by the Narragansett Company therefor, including the payment received as a service charge or otherwise incidental to or arising out of the service rendered or to be rendered by the Narragansett Company to the Attleboro Company.

#### DISCOUNTS

The above rate is net.

## TERM OF CONTRACT

April 1, 1921 to April 1, 1938. Effective on all electricity billed on and after April 1, 1921.

> (Stamped) RECEIVED April 6, 1921.

21

PUBLIC UTILITIES COMMISSION STATE OF RHODE ISLAND.

A true copy.

### Attest:

(Signed) George A. Carmichael, Secretary.

### PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

Petition of Narragansett Electric Lighting Company filed with accompanying schedules on the sixth day of April, A. D. 1921 requesting waiver of statutory thirty days notice upon a certain rate schedule R. I. P. U. C. Number 101, cancelling R. I. P. U. C. Number 68, for the purpose of increasing the rate paid by the Attleboro Steam and Electric Company for electricity considered on the sixth day of April A. D. 1921 at an informal hearing at which representatives of both companies were in attendance and heard.

23

It appearing that a continuance of the operation of the terms of the rate contract between said companies would result in a loss to the petitioning company and would therefore discriminate against its other consumers, and action upon said petition having been deferred by the Commission in order that said companies might continue negotiations for the purpose of arriving at a mutually satisfactory and equitable modification of said rate contract.

It now appearing that such negotiations have been without result.

24 Upon consideration, it is

ORDERED: That, for good cause shown, said Narragansett Electric Lighting Company be and it hereby is authorized to put into effect without the statutory publication and notice to the Commission, tariff R. I. P. U. C. Number 101, cancelling

R. I. P. U. C. Number 68, for the purpose of increasing the rate paid by the Attleboro Steam and Electric Company for electricity.

April 27, 1921.

No. 584.

A true copy.

Attest:

(Signed) George A. Carmichael, Secretary.

The Defendant, Narragansett Electric Lighting Company, contends that it has followed the procedure prescribed in the last paragraph of Section 48 of the Public Utilities Act of 1912, Public Laws of Rhode Island, Chapter 795, as amended by Chapter 1651, Public Laws 1918.

"Sec. 48. (As amended by Chapter 1651, Public Laws, 1918.) Every public utility shall file with the commission within a time to be fixed by the commission, schedules which shall be open to public inspection, showing all rates, tolls and charges which it has established and which are in force at the time for any service performed by it within the state, or for any service in connection therewith or performed by any public utility controlled or operated by it. A copy of so much of said schedules as the commission shall deem necessary for the use of the public shall be printed in plain type, or typewritten, and kept on file in every station

or office of such public utility where payments are made by the consumers or users, open to the public in such form and place as to be readily accessible and conveniently inspected, and as the commission may order. The commission may determine and prescribe the form in which the schedules, required by this section to be kept open to public inspection, shall be prepared and arranged, provided, that with respect to public utilities subject to the federal "Act to Regulate Commerce," so-called, the form of such schedules shall be that from time to time prescribed by the Interstate Commerce Commission. No change shall be made in the rates, tolls, and charges which have been filed and published by any public utility in compliance with the requirements of this section. except after thirty days' notice to the commission and to the public published as aforesaid, which shall plainly state the changes proposed to be made in the schedule then in force, and the time when the changed rates, tolls or charges will go into effect. Whenever the commission receives such notice of any change or changes proposed to be made in any schedule filed under the provisions of this section, it shall have power either upon complaint as specified in Section eighteen hereof, or upon its own motion and upon such notice as provided for in Section twenty hereof to hold a public hearing and make investigation as to the propriety of such proposed change or changes. After notice of any such investigation, the commission shall have power by any order

29

served upon the public utility affected to suspend the taking effect of such change or changes pending the decision thereon, but not for a longer period than three months beyond the time when such change or changes would otherwise take effect. After such hearing and investigation either upon complaint as specified in Section eighteen hereof or upon its own motion, the commission may make such order in reference to any proposed rate, toll or change as may be proper. At any such hearing involving any proposed increase in any rate, toll or charge, the burden of proof to show that such increase is necessary in order to obtain a reasonable compensation for the service rendered shall be upon the public utility:

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PROVIDED, that the commission may, in its discretion and for good cause shown, allow changes within less time than required by the notice herein specified, and without holding the hearing and investigation herein provided for or modify the requirements of this section with respect to filing and publishing tariffs either in the particular instance or by general order applicable to special or particular circumstances or conditions."

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The Plaintiff contends that procedure under that paragraph did not result in a finding of the commission that the old rate was unreasonable or that the new rate was reasonable, and that the filing of a schedule of changed rates under that Section cannot accomplish the result of abrogating contract rates.

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Plaintiff relies upon Wichita Railroad v. Public Utilities Commission, 260 U. S. 48, 56, 57.

The Defendant attempts to distinguish this case as a decision upon a procedural point under a statute different in that it expressly required a finding of the commission as to the unreasonableness of the old rate and the reasonableness of the new rate.

But we cannot regard Section 48 as indicating that a contract rate can be abrogated without a finding after a hearing and investigation, that it is unreasonable.

The Commission in Section 48 is given power to make such order as may be proper after hearing and investigation and after the Public Utility has sustained the burden of proof as to necessity.

Should we assume, as Defendant contends, that the Public Utilities Act contains no other provision which in terms is applicable and that therefore the right of the Public Utility to change a contract rate must be worked out under Section 48, it would follow that any authority of the Commission to make such order as "may be proper" and as should determine the necessity, in the public interest to make a change, cannot be exercised without a determination of the propriety of the change.

Furthermore it is said at page 59 of said opinion:

"In creating such an administrative agency the legislature, to prevent its being a pure delegation of legislative power, must enjoin upon it a certain course of procedure and certain rules of decision in the performace of its function." In view of the provisions of Section 21 of the Act, which fixes the rules for decision, and makes the power of the Commission to institute new rates conditional upon a finding that existing rates are "unjust, unreasonable, insufficient or unjustly discriminatory, or to be preferential or otherwise in violation of any of the provisions of the Act" as well as upon a finding that the substituted rate "shall be just and reasonable," it cannot be held that it was the legislative intention by a mere proviso in Section 48 to dispense with such findings when the Public Utility itself seeks relief under Section 48.

It seems clear that the Public Utility cannot by a mere consent of the Commission dispense with proceedings or rules of decision clearly laid down in Section 21 of the Act and also in the body of Section 48 preceding the proviso.

In Arkansas Gas Company v. Railroad Commission, 261 U. S. 379, on pages 382 and 383 it is said:

"While a State may exercise its legislative power to regulate public utilities and fix rates, notwihstanding the effect may be to modify or abrogate private contracts (Union Dry Goods Co. v. Georgia Public Service Corp., 248 U. S. 372, 375; Producers Transportation Co. v. Railroad Comm., 251 U. S. 228, 232), there is, quite clearly no principle which imposes an obligation to do so merely to relieve a contracting party from the burdens of an improvident undertaking. The power to fix rates, when exerted, is for the public welfare, to which private contracts must yield; but it is not an independent legislative function to vary

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4.

or set aside such contracts, however unwise and unprofitable they may be. Indeed the exertion of legislative power solely to that end is precluded by the contract impairment clause of the Constitution. The power does not exist per se. It is the intervention of the public interest which justifies and at the same time conditions its exercise."

In the records of the proceedings of the Commission we find no sufficient statement of any finding made after bearing and investigation upon the question of the unreasonableness of the contract rate or of the reasonableness or proprity of the new rate unless in the following recital:

"It appearing that a continuance of the operation of the terms of the rate contract between said companies would result in a loss to the petitioning company and would therefore discriminate against its other customers."

The finding that the contract was unprofitable and therefore discriminatory rested upon *ex parte* statement and moreover is a *non sequitur*.

That the initial return was low and that profit was expected during later years was stated in the Defendant's application to the Commission for approval of the contract rates. There was no finding that a present loss would result in rendering the contract as a whole unprofitable. New York and Queens Gas Company v. McCall, 245 U. S. 345, and Puget Sound Traction, Light and Power Company v. Reynolds, 244 U. S. 574.

Before a contract can be interfered with under the police power it must appear that the contract does in some manner affect adversely the welfare of the public.

There is nothing in the records to show that the Defendant brought to the notice of the Commission, any evidence that the company would be unable to perform its full duty to the community whose interest it is the function of the committee to protect.

The Plaintiff relies upon the contract. By answer the Defendant as a justification for its demand for an increased rate and for its threat to cut off the Plaintiff's supply of electricity as a means of coercion to pay such increased rate sets up its own action in filing an increased rate, and also the action of the Public Utilities upon its request for a waiver of the statutory notice and for allowing the rate to become effective.

Assuming that the Public Utilities Act afforded no other mode of relief than procedure under Section 48 to enable the defendant on grounds of public interest to abrogate the terms of the contract with respect to rates, it was still the duty of the defendant under the statute to sustain the burden of proof that the increase was necessary in order to obtain a reasonable compensation for its service. It was also the duty of the Commission to require proof sufficient to sustain this increase.

As the defendant has not invoked relief through the exercise of the power of the Commission as a legislative agent to determine the question of the unreasonableness of the old rate and the reasonableness of the new rate but merely to relieve it 44

from statutory requirements as to notice, its only defense is its own act in increasing the rate. It has introduced no other justification than the consent of the Commission to its request that it be made effective at once.

It has failed therefore to show that the legislative power delegated to the Commission in the public interest, has ever been exercised in the interest of the public in any mode pointed out in the Public Utilities Act.

The defendant is subject to public regulation only to the extent of the public interest in its business.

Even if the Commission had received an ex parte statement that a single contract was for the time being unprofitable, this was far from establishing the fact that the public interest had been injuriously affected.

Should the defendant be permitted to carry out its threat of cutting off the supply of electrical energy there would result great interference with plaintiff's business and damages difficult to estimate in an action at law. The case is therefore a proper one for equitable relief by injunction against coercion to yield to an illegal demand.

American Railroad Company of Porto Rico v. South Porto Rico Sugar Company, C. C. A., 1st Circuit, November 24, 1923, 293 Fed. 670.

It is also urged that the Plaintiff has not adopted and exhausted its remedies under the Public Utilities Act, Section 18, by complaint before the Commission, with an appeal to the Supreme Court of Rhode Island under Section 34.

The question that would arise under Section 18 would be as to the reasonableness of the rate, an administrative question. The Plaintiff here does

not raise that question but only the question whether the Defendant's claim that it has been relieved by legislative authority from the contract rate has any legal foundation. It does not raise the question of the reasonableness per se of what is claimed to be a newly established rate—it claims merely that nothing has been done by the Defendant or the Commission which has the legal effect of changing the old rate.

This is a judicial question of which this court has jurisdiction in a suit between citizens of different states. While the Supreme Court of the State of Rhode Island under Section 34 has jurisdiction on appeal from an order of the commission not only as to questions of unreasonableness of rates but as to the unlawfulness of an order, this latter jurisdiction over a purely judicial question is not exclusive of the Federal jurisdiction in a suit between citizens of different states. There seems to be no reason why the right of the Plaintiff to seek an injunction against a threatened injury and to escape unlawful coercion to pay a rate not established as a reasonable rate in accordance with the Public Utilities Act, should be subjected to the condition that it should first apply to the Commission to reverse its order-American Railroad Company of Porto Rico v. South Porto Rico Sugar Company, 293 Fed. 670; Mitchell Coal Company v. Pennsylvania Railroad Company, 230 U. S. 247; People of Porto Rico v. American Railroad Company of Porto Rico, 254 Fed., pages 367, 377, 378.

But one decision of the Supreme Court of Rhode Island relating to the Public Utilities Act has been cited—Rivelli v. Providence Gas Company, 44 R. I. 76, 77, 78, Dec. 9, 1921: 50

"The schedule of rates was filed by the Gas Company with the Commission as required by Sec. 48, Chap. 795, Public Laws, 1912, known as the Public Utilities Act, which provides, among other things, that no change shall be made in existing rates, excepting after thirty days' notice to the Commission and to the public of the changes proposed to be made in the schedule then in effect, and the time when the change of rates will go into effect. commission has no authority to fix rates for a public utility excepting when, after a hearing and investigation, it finds that the existing rates are unjust, unreasonable, insufficient or unjustly discriminatory, or to be preferential or otherwise in violation of the provisions of said Public Utilities Act. Sec. 21, Chap. 795, Public Laws, 1912."

While this case is not directly in point it refers to and recognizes Section 21 of this Act as defining the authority of the Commission and as establishing the rules of decision applicable in fixing rates. Section 48 should be construed consistently with Section 21, and the proviso of Section 48 should not be construed inconsistently with the body of Section 48 and with Section 21.

The Defendant further contends that the mere filing of a new schedule is in itself a valid method of changing rates, and that even if the allowance of the filing of the new rate by the Commission in accordance with Section 48, did not amount to a finding as to the reasonableness of the rates, it yet waived the provision as to notice of changes and permitted the Defendant at an earlier time to exercise its own right to change a rate. It cites

> Pub. Ser. Com. v. Pavilion Nat. Gas Co., 232 N. Y. 146 (1921);

Town of North Hempstead v. Pub. Ser. Corp., 231 N. Y. 447 (1921);

Suburban Water Co. v. Oakmont Borough, 268 Pa. 243 (1920);

Duquesne Light Co. v. Pub. Ser. Com., 117 Atl. 63 Pa., (1922);

North Coast Power Co. v. Kuykendall, 201 Pac. 780 Wash. (1921);

Minneapolis, etc. R.R. v. Menasha W. W. 56 Co., 159 Wis. 130 (1914):

Cleveland and Eastern Traction Co. v. Pub. Ser. Com. P. U. R. 1923 D, 853 (Ohio Sup. Ct.);

Harrison Electric Co. v. Citizens Ice & Storage Co., 232 S. W. 932 (Ark. 1921);

V. & S. Bottle Co. v. Mountain Gas Co., 261 Penn. 523 (1918);

Denver & South Platte Ry. Co. v. City of Englewood, P. U. R., 1916 E. 134 (Colorado Sup. Ct.).

It seems evident however that the Defendant cannot itself exercise the police power of the State to relieve it in the public interest from a burdensome contract.

Nor can its own judgment be accepted by this Court as a sufficient ground for disregarding the contract rights of the Plaintiff. Rutland R. Lt. & Power Co. v. Burditt, 94 Vt. 421, 422. In re Searsport Water Co., 118 Maine 382, 393.

60

The question of the reasonableness of what it has attempted to do, and whether the public interest is such as to override the obligation of its contract, involves an administrative question which cannot be determined by the Defendant or by this Court

The statutory commission was created by the Legislature to determine such questions, and the proper course is to obtain that judgment. Legislative relief under reserved powers should be sought from the Legislature's administrative agent, the Public Utilities Commission. The result of proceedings before the Commission fails to show that the Defendant procured a finding of the Commission that it was entitled to such relief, or that the Commission in allowing a new schedule to be filed, added anything of force to the act of the Defendant in the filing of the rate.

The practical effect of what was done is the same as if after filing of the rate, the period of thirty days, fixed by Section 48 for notice had elapsed without action by the Commission.

The change therefore represents only the act of the Defendant alone and this is no ground for disregarding the contract right of Plaintiff.

The power of the Commission to fix a rate which shall relieve a contracting party from the obligations of a contract, must be exercised as provided by the Rhode Island statute, which when interpreted as the Supreme Court of the State has interpreted it in Rivelli v. Providence Gas Co., 44 R. I. 76, 78, requires a finding in accordance with Section 21.

Wichita Railroad & Light Company v. Public Utilities Commission of the State of Kansas, 260 U. S. 48, seems therefore not distinguishable on the ground that the statutory requirements are substantially different.

It is further urged that the order of the Commission set up in Defendant's answer is not subject to collateral attack.

But the legal objections to the defendant's new schedule involve no question of administrative discretion as to the reasonableness of this rate, but questions of law as to the effect of a proceeding under the proviso of Section 48 and as to the statutory powers of the Commission.

Of such questions the Court has jurisdiction without preliminary resort to the Commission—Great Northern Railway Company v. Merchants Elevator Company, 259 U. S. 285, page 295.

I am of the opinion that the Plaintiff is entitled to an injunction to prevent damages from interference with its business and to prevent coercion to compel compliance with demands for a rate which is not established in accordance with the provisions of the Public Utilities Act, and that such injunction should continue until a new rate shall be established by act of the Commission in accordance with the provisions of that act. Relief by injunction however should be granted only on condition of the performance by the Plaintiff of its obligation to pay according to the terms of the contract.

If as the brief states it has held the funds with which to make payment in separate deposits ready to be turned over upon receipt of a correct statement of the amount due, which it could not have 62

without information from Defendant, it seems right to require not only payment of the amount due as of the date when payable, but interest thereon at such rate as has been earned on such deposits, since it would be unjust for Plaintiff to profit by delay. The failure of the Defendant to make known the amount due, may disentitle it to claim interest at the legal rate, but any actual earnings of interest on such parts of sums set aside in separate deposits may be treated as an increment of the amount due which belongs to defendant rather than to plaintiff.

65

The decree for an injunction may be made conditional upon the payment by the Plaintiff of the sums due on the contract with any actual increment of interest thereon. For all amounts paid pending this suit by Plaintiff in excess of the contract rate the Plaintiff should have credit with interest at 6%.

A draft decree for an injunction and further relief in accordance with this opinion may be presented by the Plaintiff.

May 7, 1924.

To the Public Utilities Commission, State of Rhode Island.

Dear Sirs:

We are filing herewith R. I. P. U. C. No. 125, comprising a new schedule of rates, which we have called Electric Lighting Company Rate N, applicable by its terms to all public utilities which now purchase or may hereafter purchase electrical energy from us beyond a certain minimum amount.

We also enclose with this letter a certified copy of an opinion handed down by Judge Brown of the District Court of the United States for the District of Rhode Island, dated February 12, 1924, in the case of Attleboro Steam and Electric Company v. Narragansett Electric Lighting Company, Equity No. 173.

An agreement was entered into between the two companies on May 8, 1917, the Narragansett Company undertaking to supply the Attleboro Company with current for twenty years at a rate set forth in R. I. P. U. C. No. 68, on file with your Commission. On April 6, 1924, our Company filed a new schedule with your Commission, and your Commission, on April 27, 1921, made the order set forth in the Court's opinion, said schedule being filed with your Commission as R. I. P. U. C. No. 101.

The Court does not question the jurisdiction of your Commission to change the rate fixed by this agreement, but holds that the proceedings taken, which we had supposed were effective in accordance with Section 48 of the Public Utilities Act of Rhode 68

70 Letter of President to Public Utilities Commission

Island to change the contract rate designated in R. I. P. U. C. No. 68, to that set forth in R. I. P. U. C. No. 101, were not sufficient to effect that result.

The reason given is that rates fixed by contract may only be changed by the Commission, after notice, formal hearing, investigation and finding. There must be both a finding that the old rates are "unjust, unreasonable, insufficient or unjustly discriminatory, or to be preferential or otherwise in violation of any of the provisions of the act"; and that the new rates are "just and reasonable." In these proceedings our Company would, of course,

71 have the burden of proof.

We believe that the District Court is in error in its opinion and that R. I. P. U. C. No. 101 is a validly established rate. But until a new rate is established by your Commission in conformity with the opinion of the District Court, we are in effect enjoined from charging at any but the old contract rate. This rate we believe and expect to be able to prove to the satisfaction of your Commission to be unreasonable and unjustly discriminatory. We therefore deem it incumbent upon us to have put in force as soon as may be, a rate applicable in terms to all public utility customers purchasing more than a certain minimum, which shall be just and reasonable, and which shall be a validly established rate in accordance with the tests laid down by the District Court.

At the trial above referred to, counsel for the Attleboro Company made certain objections to the rate R. I. P. U. C. No. 101, apart from the objections as to the sufficiency of the proceedings taken

before your Commission. During the oral argument the Court seemed to think these objections might be well founded. The objections were: (a) that the schedule R. I. P. U. C. No. 101 is too vague and indefinite to constitute a valid rate; (b) that your Commission cannot validly put in effect a new rate applicable in terms to only a single contract customer, at least without that customer's consent; (c) that no term of a contract can be changed by your Commission except the rate itself and that the new schedule attempts to make other changes. We have endeavored to construct a new rate which shall be free from these objections. We have based the general rate on costs as closely as we could estimate them, making the rate bear the same relation to cost of service that the rate for each of our other classes of service bears to the cost of such service. We have also compared the specific cost of the energy furnished the Attleboro Company and find that this checks closely with the schedule.

For these reasons we are filing with your Commission, and hereby give your Commission notice of, the proposed change in rate embodied in R. I. P. U. C. No. 125, effective by its terms as to all service rendered after 12 o'clock midnight, June 14, 1924. We believe and expect to be able to prove to the satisfaction of your Commission, that the old rate, R. I. P. U. C. No. 68, for the contract as a whole, is unreasonable and unjustly discriminatory and affects adversely the welfare of the public, and that the new rate proposed is just and reasonable. We are of the opinion that the new rate will, even if no action is taken by your Commission, become effective when and as specified in the rate

74

76 Letter of President to Public Utilities Commission

schedule. But inasmuch as the District Court is of a different opinion, we respectfully request that your Commission, upon its own motion, hold a publie hearing, make full investigation, and if your Commission finds that the rate R. I. P. U. C. No. 68 is unjust, unreasonable, insufficient or unjustly discriminatory, or to be preferential or otherwise in violation of the act, order this rate superseded by the new general rate for public utilities filed berewith, if your Commission finds that this rate is just and reasonable; or by such other rate as your Commission shall find to be just and reasonable; all in accordance with Sections 48, 19-21, and 26-29 of the Public Utilities Act, so far as the same may. in the light of the District Court's opinion, seem to your Commission applicable.

We are sending a copy of this letter and of the accompanying rate schedule to the Attleboro Steam & Electric Company for its information.

Respectfully yours,

NARRAGANSETT ELECTRIC LIGHTING COMPANY,

[Sgd] E. A. Barrows, President.

Enclosures.

77

78
Received May 7, 1924.
Public Utilities Commission,
State of Rhode Island.

# Notice of Investigation.

79

# PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

PUBLIC UTILITIES COMMISSION on its own motion

228.

NARRAGANSETT ELECTRIC LIGHTING COMPANY. Notice of Investigation

Whereas, The Narragansett Electric Lighting Company has on the seventh day of May, A. D. 1924, filed with the Public Utilities Commission a certain rate schedule, R. I. P. U. C. #125, cancelling R. I. P. U. C. #68 and #101, to be effective on all electricity delivered after 12:00 o'clock midnight June 14, 1924 (copies of which schedule are hereto annexed), which said schedule affects, modifies and changes the rates now charged by said Company to the Attleboro Steam and Electric Company.

Now therefore the Public Utilities Commission on its own motion and upon the notice hereinafter provided for, hereby orders an investigation and public hearing upon the question of whether the existing rates, tolls and charges of the Narragan-sett Electric Lighting Company now charged to the Attleboro Steam and Electric Company or those proposed to be charged to said Company and other electric lighting companies under said rate schedule R. I. P. U. C. #125, cancelling R. I. P. U. C. #68 and #101, are unjust, unreasonable, insufficient or unjustly discriminatory, or preferential or

81

84

otherwise in violation of any of the provisions of the Public Utilities Act of the State of Rhode Island, and otherwise upon the question as to the propriety of the proposed change or changes embodied in said Schedule #125, and it is further

(829) Ordered: That notice of such investigation be given forthwith by mail to the Narragansett Electric Lighting Company and to the Attleboro Steam and Electric Company that public hearing shall be held by the Public Utilities Commission at Room 121, State House, Providence, Rhode Island, on Monday, May 26th, A. D. 1924, at 10 o'clock A. M. (Eastern Daylight Saving Time), and that further notice of such public hearing be given by publication of a copy of this order on May 16th and 23rd, 1924 in the Providence Journal.

Now THEREFORE, Notice is hereby given you that after the expiration of ten days from the date of the service of this notice upon you, the undersigned will proceed to investigate the matters and things set forth in said complaint.

Dated this seventh day of May, A. D. 1924.

PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

> By WILLIAM C. BLISS, SAMUEL E. HUDSON, ROBERT F. RODMAN,

Commissioners.

[Seal of Public Utilities Commission.]

TO NARRAGANSETT ELECTRIC LIGHTING CO.

A true copy.

Attest:

(Signed) George A. Carmichael, Secretary. R. I. P. U. C. No. 125 Cancelling R. I. P. U. C. Nos. 68 & 101

NARRAGANSETT ELECTRIC LIGHTING COMPANY

Electric Lighting Co. Rate N

#### CHARACTER OF SERVICE

Electricity will be supplied under this rate to Electric Lighting Companies for use by them or for sale to their customers. Such electricity will be delivered in the form of 3 phase, 60 cycle, alternating current at the voltage at which it is transmitted to the point of delivery, which point of delivery shall be such location as may be mutally agreed upon, provided, however, that in all cases where the customer is located without the State of Rhode Island, such location shall be at the Rhode Island State Line. Meters for registering the current delivered and for the determination of the maximum taking shall be located at the point of delivery, unless some other location may be mutually agreed to, in which case the necessary adjustment shall be made in the meter readings to ascertain the current delivered and the maximum taking as of the point of delivery.

RATE

87

Demand in kilowatts, 3,000 or over.

Annual investment charge per kilowatt of demand, \$19.00.

Electricity charge per kilowatt hour, 8 mills.

. . -

TERM OF CONTRACT

One year or over.

#### BILLS

Bills shall be rendered monthly for one-twelfth part of the annual investment charge and for electricity delivered during the previous month and shall be due and payable within fifteen days of rendition.

STANDARD CONTRACT RIDERS AND TERMS AND CON-DITIONS

89

The Company's Standard Contract Riders and Terms and Conditions on file from time to time with the Public Utilities Commission, where not inconsistent herewith or otherwise mutually agreed, are made a part hereof.

Effective on all electricity delivered after 12

o'clock midnight June 14, 1924.

# R. I. P. U. C. No. 68

# NARRAGANSETT ELECTRIC LIGHTING COMPANY

Special Rate to the Attleboro Steam and Electric Company

## CHARACTER OF SERVICE

22,000 volt, 3 phase, 60 cycle alternating current delivered at the state line between the town of East Providence, Rhode Island, and the Town of Seekonk, Massachusetts.

#### CONDITIONS

92

Transmission lines outside the State of Rhode Island to be furnished by foreign corporations for an annual payment of fifteen per cent. (15%) of their cost.

#### RATE

8.57 mills per kilowatt hour as registered by the meters installed in the substation of the Attleboro Steam and Electric Company.

The Narragansett Company to pay \$1750.00 per year for operation of the receiving substation.

Above price to be subject to increase or decrease for fluctuations in the cost of coal above or below \$3.50 per long ton alongside the Narragansett Electric Lighting Company's station; also to increase or decrease to cover increase or decrease in regular or special taxes or new taxes.

# Notice of Investigation

# TERM OF CONTRACT

Twenty (20) years and thereafter unless discontinued by either party.

Effective

## Issued

(Stamped)
Received May 16, 1917.
Public Utilities Commission,
JOHN W. ROWE,
Secretary.

R. I. P. U. C. No. 101. Cancelling R. I. P. U. C. No. 68.

NARRAGANSETT ELECTRIC LIGHTING COMPANY

Special rate to Attleboro Steam and Electric Company

## CHARACTER OF SERVICE

Electricity to be delivered to the Attleboro Company at the East Providence Sub-Station of the Narragansett Company or at such other point or points as may be mutually agreed upon by the parties at 22,000 or other agreed voltage. Said electricity to be in the form of three phase, sixty cycles, alternating current.

98

#### CONDITIONS

The Attleboro Company to receive electricity at said East Providence Sub-Station and to bear all expense of transmitting the electricity thus received.

#### RATE

(a) A service charge of such amount as will equal the cost to the Narragansett Company of taxes, insurance, depreciation, obsolescence and any other fixed charges and net the Narragansett Company an eight per cent. dividend upon that portion of the cost of the plant which can properly be allocated to the generation of electricity for and the delivery of such electricity to the Attleboro Company.

- (b) A charge per kilowatt hour for all electricity delivered which shall be equal to the cost per kilowatt hour to the Narragansett Company of generating and delivering such electricity to the Attleboro Company at said point of delivery plus a fixed addition thereto of 1 mill per kilowatt hour.
- (c) A charge equal to any and all taxes paid by the Narragansett Company on account of or having relation to the electricity generated for or sold or delivered to the Attleboro Company or any payments receivable or received by the Narragansett Company therefor, including the payment received as a service charge or otherwise incidental to or arising out of the service rendered or to be rendered by the Narragansett Company to the Attleboro Company.

## DISCOUNTS

The above rate is net.

## TERM OF CONTRACT

April 1, 1921 to April 1, 1938.

Effective on all electricity billed on and after April 1, 1921.

(Stamped)

102 Received April 6, 1921.

Public Utilities Commission,
State of Rhode Island,
G. A. CARMICHAEL,
Secv.

Copy of Advertisement in Regard to Public Hearing. 103

# PUBLIC UTILITIES COMMISSION OF RHODE ISLAND

## PUBLIC HEARING

Notice is hereby given that a public hearing will be held by the Public Utilities Commission, Monday, May 26, A. D. 1924 at 10 o'clock A. M. (Eastern Standard Daylight Saving Time) in Room 121, State House, upon the question of whether the existing rates, tolls and charges of the Narragansett Electric Lighting Company now charged to the Attleboro Steam and Electric Company or those proposed to be charged to said Company and other electric lighting companies under Rate Schedule R. I. P. U. C. #125, cancelling R. I. P. U. C. #68 and #101, are unjust, unreasonable, insufficient or unjustly discriminatory, or preferential or otherwise in violation of any of the provisions of the Public Utilities Act of the State of Rhode Island and otherwise upon the question as to the propriety of the proposed change or changes embodied in said Schedule #125.

# PUBLIC UTILITIES COMMISSION, STATE OF RHODE ISLAND, By George A. Carmichael,

Secretary.

Providence Journal, Friday, May 16th and Friday, May 23rd, A. D. 1924.

(Kindly send affidavit of publication as soon as printed.)

104

106 Letter from R. G. Dodge to Narragansett Electric Lighting Company.

> 735 Exchange Building, Boston 9th May 1924.

Public Utilities Commission State House Providence, R. I.

(Attention Mr. Carmichael)

Dear Sirs:

(Re Narragansett Electric Lighting Company)

107

I acknowledge receipt of your letter of May 8th directed to Attleboro Steam & Electric Company and enclosing Commission Order No. 829 and other papers. I represent the Attleboro Company in the matter and had been advised of the filing of a petition by the Narragansett Electric Lighting Company. When your letter of May 8th reached me I was about to write and ask that the hearing on the matter be not assigned for the last week in May as I have a long standing engagement to try a case in another state during that week. I have just telephoned Mr. Graustein, who represents the Narragansett Company and find that it would be entirely agreeable to him if the hearing before your Board could be adjourned to Monday, June 2. shall appreciate it very much if you would let me know whether this can be arranged.

108

As you know, it has been our contention that if the contract between the two companies involves interstate commerce, the Rhode Island Commission has no jurisdiction over it. This contention, of Letter from R. G. Dodge to Narragansett Electric 109 Light Company

course, must be passed upon by the courts and we have not yet decided whether we shall make an application to the Supreme Court of Rhode Island before the hearing or whether we shall raise the question in the first instance before the Commission.

Very truly yours,

(sgd.) R. G. Dodge.

Received May 10, 1924.

Public Utilities Commission,
State of Rhode Island.

112 Letter from Narragansett Elecrtic Light Company to Public Utilities Commission

May 21, 1924.

Public Utilities Commission, State House, Providence, R. I.

Dear Sirs:

On May 7th we filed with you R. I. P. U. C. No. 125 comprising a new schedule of rates applicable to public utilities which may now purchase or may hereafter purchase electric energy from us. We are now submitting, herewith, the data on which this schedule is based.

The charges under this schedule consist of an annual investment charge for each kilowatt of demand and an electricity charge for each kilowatt hour of electricity delivered. The investment charge is designed to cover depreciation, taxes and insurance on that part of our investment properly chargeable to the production and delivery of electricity to the customers coming within said schedule in the manner and form therein specified and to produce thereon a net return of 8% per annum. The electricity charge is designed to cover the cost of producing and delivering electricity to the point of delivery specified in said schedule due allowance being made for contingencies.

In preparing this data great weight has been given to the specific property used in supplying electricity to the Attleboro Steam & Electric Co. as it is contemplated that this Company will be the first customer to be supplied under this rate. Al-

114

Letter from Narragansett Elecrtic Light Company 115 to Public Utilities Commission

though this schedule may be justified otherwise than on the data submitted herewith, we feel that such data is in itself sufficient.

We are this day mailing to the Attleboro Steam and Electric Company, 60 Congress Street, Boston, Mass., a copy of this letter together with the data mentioned herein. We are also inviting them to examine our books and records for the purpose of expediting the course of your investigation as much as possible, all as set forth in our letter to them of even date, a copy of which we are enclosing herewith.

116

Very truly yours,

NARRAGANSETT ELECTRIC LIGHTING CO.

E. A. BARROWS.

JEG/K Encs.

President. J.E.G.

Received May 22, 1924. Public Utilities Commission, State of Rhode Island.

Tariff No. 125-Rate N

R. I. P. U. C. No. 125

Cancelling R. I. P. U. C. Nos. 68 & 101

# NABRAGANSETT ELECTRIC LIGHTING COMPANY ELECTRIC LIGHTING CO. RATE N

## CHARACTER OF SERVICE

Electricity will be supplied under this rate to Electric Lighting Companies for use by them or for sale to their customers. Such electricity will be delivered in the form of 3 phase, 60 cycle, alternating current at the voltage at which it is transmitted to the point of delivery, which point of delivery shall be such location as may be mutually agreed upon provided, however, that in all cases where the customer is located without the State of Rhode Island, such location shall be at the Rhode Island State Line. Meters for registering the current delivered and for the determination of the maximum taking shall be located at the point of delivery, unless some other location may be mutually agreed to, in which case the necessary adjustment shall be made in the meter readings to ascertain the current delivered and the maximum taking as of the point of delivery.

120

119

#### RATE

Demand in Annual Investment Charge Kilowatts Per Kilowatt of Demand 3,000 or over \$19.00 Electricity Charge Per Kilowatt Hour 8 mills

#### TERM OF CONTRACT

One year or over.

#### BILLS

Bills shall be rendered monthly for one-twelfth part of the annual investment charge and for electricity delivered during the previous month and shall be due and payable within fifteen days of rendition.

STANDARD CONTRACT RIDERS AND TERMS AND CONDITIONS

The Company's Standard Contract Riders and Terms and Conditions on file from time to time with the Public Utilities Commission, where not inconsistent herewith or otherwise mutually agreed, are made a part hereof.

122

Effective on all electricity delivered after 12 o'clock midnight June 14, 1924.

## PUBLIC UTILITIES COMMISSION OF RHODE ISLAND

The Commission having received notice of a change proposed to be made in Schedule R. I. P. U. C. No. 101 (and in Schedule R. I. P. U. C. No. 68 if and in so far as the said schedule is now in effect), the Commission on its own motion and upon the notice hereinafter provided for, hereby orders a public hearing and investigation as to the propriety of such proposed change.

123

Such public hearing and investigation shall be held at on , May , 1924, at o'clock in the forenoon, and notice thereof shall be given this day by mail to Narragan-

# Tariff No. 125-Rate N

sett Electric Lighting Company and to Attleboro Steam & Electric Company, and by publication on , May , 1924, and on

, May  $\,$  , 1924, in the Providence Journal. May  $\,$  , 1924.

Received
May 7, 1924
Public Utilities Commission
State of Rhode Island

PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

PUBLIC UTILITIES COMMISSION ON ITS OWN MOTION

v. NARRAGANSETT ELECTRIC LIGHTING COMPANY.

In the above entitled cause it appearing to the Public Utilities Commission that it is desirable that all parties at interest may have further opportunity to obtain and present data which it is desired to have as possible evidence and in order that the Commission may have more time in which to hear arguments and further testimony, if introduced, upon the question of whether the rates, tolls and charges of the Narragansett Electric Lighting Company in its tariff R. I. P. U. C. #125, cancelling R. I. P. U. C. #68 and #101, are unjust, unreasonable, insufficient or unjustly discriminatory or preferential or otherwise in violation of any of the provisions of the Public Utilities Act of the State of Rhode Island and otherwise upon the question as to the propriety of the proposed change or changes embodied in said schedule #125.

129

Now THEREFORE, on the second day of June, A. D. 1924, it is hereby

(8351/2) ORDERED: That tariff R. I. P. U. C. #125, cancelling R. I. P. U. C. #68 and #101 filed by

# Order No. 8351/2

Narrangansett Electric Lighting Company, to become effective on all electricity delivered after 12 o'clock midnight June 14, A. D. 1924, is hereby suspended until August 14, A. D. 1924.

Dated this second day of June, A. D. 1924.

Public Utilities Commission of Rhode Island, By

WILLIAM C. BLISS, SAMUEL E. HUDSON, ROBERT F. RODMAN, Commissioners.

131

A true copy.

Attest:

GEORGE A. CARMICHAEL,

[SEAL]

Secretary.

Letter from Jesse E. Gray to Public Utilities Commission. 133

## NARRAGANSETT ELECTRIC LIGHTING COMPANY

Providence, R. I.

July 10, 1924

Public Utilities Commission Providence, R. I.

Dear Sirs:

In re-checking we find that on page 5 of our Exhibit No. 10 although the capital costs are for twenty years, the period specified in our contract with the Attleboro Company, nevertheless, the exhibit submitted does not cover a period exactly coinciding with the period of the contract inasmuch as we have figured a full year's capital costs in 1918 and nothing in 1938, whereas to coincide exactly with the period of the contract there would be nine months in 1918 and three months in 1938. Had we taken the actual contract period the results would have been more favorable to us than those set forth in our exhibit, as the loss in the first three months of 1938 would have been more than the loss in the first three months of 1918.

We desire to call this to your attention, however, as in the above mentioned exhibit the data for 1918 is marked "(9 months)".

Had the loss in 1918 been figured for nine months instead of twelve months, capital costs would have been reduced to \$27,905.75 and the total cost of supplying service to \$65,637.15. This would have made the net loss for nine months \$29,479.12. The

134

# Letter from J. E. Gray to Public Utilities Commission

reduction in the loss for 1918 would have been more than offset by the loss for the first three months of 1938, which as stated above would have made the total loss for twenty years in excess of that shown in our exhibit above mentioned.

We are sending a copy of this letter to Storey, Thorndike, Palmer and Dodge, counsel for the Attelboro Company.

Very truly yours,

JEG/K

(sgd.) JESSE E. GRAY, Assistant Secretary.

137

(Stamped) Received July 10, 1924 Public Utilities Commission State of Rhode Island.

# STATE OF RHODE ISLAND AND PROVI DENCE PLANTATIONS,

PUBLIC UTILITIES COMMISSION.

May 26, 1924.

PUBLIC UTILITIES COMMISSION on its own motion

vs.

NARRAGANSETT ELECTRIC LIGHTING COMPANY.

140

## Present:

Mr. Commissioner Bliss, Chairman.

Mr. Commissioner Hudson.

Mr. Commissioner RODMAN.

GEORGE A. CARMICHAEL, Secretary.

Messrs. Barrows, Lisle and Gray appear in behalf of the Narragansett Electric Lighting Company.

Mr. Chairman Bliss: This is an investigation entitled the Public Utilities Commission on its own motion vs. Narragansett Electric Lighting Company, and the subject of the investigation is the rates contained in the proposed schedule of rates which has been filed with the Commission by the Narragansett Electric Lighting Company providing rates for the Attleboro Steam & Electric Com-

pany and modifying certain rates which were established by the terms of a contract which is approved by the Commission and later attempted to be cancelled by the subsequent rate schedule. The subject of the investigation is the reasonableness of the

rates contained in the proposed schedule.

The Commission issued notice to the parties in-

volved in this investigation and also called a public hearing, and made due advertisement of the same. Through an inadvertence on the part of the newspaper, they have published the time for the hearing as ten o'clock Eastern Standard time although the typewritten copy sent is by the Eastern Standard Daylight Saving time. The Commission will be in session until ten o'clock Eastern Standard time so that if any other party desires to enter an appearance it may do so at that time.

The Commission is in receipt of a letter signed by Robert G. Dodge of the law firm of Thorndike, Palmer & Dodge, Boston, Mass., to enter his appearance for the Attleboro Steam & Electric Company. The letter is under date of May 9, 1924, and in the body of the letter it is said, as follows:

"As you know it has been our contention as the contract between the two companies involves interstate (matters) the Rhode Island Commission has no jurisdiction over it. This contention, of course, must be passed upon by the courts and we have not yet decided whether we shall make application to the Supreme Court of Rhode Island before the hearing or whether we shall raise the question, in the first instance, before the Commission."

144

It is therefore indicated that the Attleboro Steam & Electric Company intends to enter special appearance for the purpose of urging that contention and does not by that appearance waive its right to raise the point.

Notice was served upon the companies by registered mail in accordance with the statute and the return receipts are on file with the papers.

Is it the understanding of the Commission that the Company desires a continuance for one week for hearing?—Appearances for the Narragansett Electric Lighting Company are Mr. Barrows, President; Mr. Lisle, General Manager; and Mr. Gray, Assistant Secretary.—Then the matter will be continued until June 2, 1924, 10 o'clock a. m., Eastern Daylight Saving time.

150

# Proceedings of June 2, 1924

Providence, R. I., June 2, 1924.

Met pursuant to adjournment.

#### Present:

Mr. Commissioner Bliss, Chairman.

Mr. Commissioner Hudson.

Mr. Commissioner RODMAN.

# Appearances:

For the Narragansett Electric Lighting Co., Archibald R. Graustein, Esq., Arthur M. Allen, Esq.,
Frank D. Comerford, Esq.

For the Attleboro Steam & Electric Co., Robert G. Dodge, Esq., Harold S. Davis, Esq.

Mr. Chairman Bliss: The hearing will be in order. I apologize to you, gentlemen, for the inadequate facilities we have for the hearing. We have provided a large room for hearings but it is in use today for the examination of pharmacists, and we are compelled to use this room for the hearing. I trust this examination will be completed and as soon as it is we will be able to get better facilities in the larger room.

When this matter came up a week ago today the appearances were entered and the matter was continued until this morning. Are there any further appearances? Perhaps we had better check up the appearances.

For the Narragansett Electric Lighting Company, Archibald G. Graustein, A. M. Allen, Frank D. Comerford.

For the Attleboro-

Mr. Dodge: Robert G. Dodge and Harold S. Davis represent the Attleboro Steam & Electric Company.

Mr. Chairman Bliss: Under the provisions of our statute where a rate schedule involves an increase in rates the burden of justifying the increase is upon the utility proposing it, consequently, the burden of justifying this increase which is contained in the proposed schedule will be upon the Narragansett Electric Lighting Company, and they should have the opportunity to open and present their testimony and they, being the moving party, will have the closing argument.

Mr. Dodge: Before the introduction of testimony begins, Mr. Chairman and Gentlemen, I must put upon the record my objection to the jurisdiction of the Commission. You are aware, of course, that the Attleboro Company against which this proposed rate is primarily aimed has a long term contract with the Narragansett Company which puts the case upon an entirely different plane from the ordinary case. It is a contract made in 1917 which had the approval of your board and, therefore, was given even more solemnity than the ordinary contract might have. Now, we must record our objection to the jurisdiction of the Commission over this contract, in the first place, as a matter of the construction of your statute. The Rhode Island public utility law, I think, did not contemplate

152

that contracts, particularly contracts with non-residents, should be subject to the jurisdiction of this board. I say that for three reasons; in the first place, your Board is given jurisdiction over certain classes of public utilities defined in section 2 of the act, among others, railroads having lines in this State, street railways having lines in this State, and electric light or power companies having plants in this State. Now, it is obvious that as to railroads and street railways your Board has no jurisdicition over interstate rates. tend that the legislature must be assumed to have had the same limitation in mind in giving you jurisdiction over electric companies and, therefore, your jurisdiction does not extend to interstate contracts, to interstate rates; secondly, it seems to us upon a fair construction of the statute that you were not intended to have jurisdiction over nonresidents for the reason that the statute fails to give non-residents any standing to come before the Commission themselves with complaints, and if they have not a right to come here with complaints it does not seem that the legislature could have intended that your Commission could deal with the rates payable by them upon application of anybody if they are not given the same rates as residents of the State are. The statute, we submit. would be unconstitutional although with questions of constitutionality your Board is not at present interested; but as a matter of statutory construction under section 18, the only concerns or individuals who can come in here and complain are either a public utility subject to your jurisdiction, which means a Rhode Island utility, or twenty-five

155

qualified electors meaning, of course, inhabitants of Rhode Island, or a city or town council or a corporation. Now, the word "corporation" is broad enough to include foreign corporations but we submit it could not have been so intended in view of the context; in other words, it can not be that a foreign corporation has a right to come here where foreign individuals or a foreign partnership would not have the right. Section 18 manifestly does not include residents in a neighboring State and give them any right to come here and therefore it can not be assumed that the other side has a right which we do not have, or that your Board has jurisdiction of a complaint by them. Finally, there is another argument based upon the language of the statute which seems to us to show there is no jurisdiction, that is the provision with reference to appeal. The appeal to the Supreme Court of Rhode Island is limited to public utilities or com-We are neither. We can not be a complainant under section 18. We are not here as complainants now; we are satisfied with the contract; we are not complaining of anything. We have, apparently, under your statute no right of appeal to the Supreme Court of the State and, if so, to save the constitutionality of the statute it must be construed as not being applicable to us. It would seem that the legislature did not have in mind contracts—giving your Board jurisdiction to disturb contracts for, if they had had that in mind, they would have provided for an appeal from the party who has the contract. Now, they have not done that because, as I say, they have given no appeal only to the public utilities or to a

158

complainant. On those three grounds we submit that the Board has no jurisdiction over this proposed rate or this matter in so far as it concerns the company primarily aimed at, namely, the Attleboro Steam & Electric Company. Of course, we contend, and I ought to state here to make it plain as a matter of record, that, if the statute is construed contrary to what we have suggested in any one of these three respects, we should contend that it was unconstitutional as regards the Attleboro Company which has this interstate contract which is now complained of and apparently has no right to appeal to the courts of the State. We also contend that the contract, having had the approval of the Public Utilities Commission of this State. being in that respect different from the contracts dealt with in most cases, becomes in effect a contract of the State and can not be abrogated.

Mr. Chairman Bliss: It has been the practice of the Commission in dealing with these matters to take the testimony of the parties. Of course, there is a stenographic record that goes up with the appeal so that the whole matter on appeal is open before the Supreme Court, and it is simply necessary for you to note your objections without the necessity of the Commission overruling your points. We are prepared to deal with the question and take the testimony as a matter of record so that you can enforce your rights before the other courts, of course.

162

161

Mr. Dodge: I think our rights are sufficiently saved by the statement I made.

Mr. Chairman Bliss: The Commission will assume jurisdiction. We deem it our duty to assume

jurisdiction in the matter for the purpose of hearing the matter. We feel that our jurisdiction extends to all of the practices of the utility there which is within our jurisdiction. If we assumed any other position, why, these utilities might furnish electricity outside the State, completely outside our jurisdiction and out of any one's else jurisdiction.

The Attleboro Company was Mr. Graustein: served by the Narragansett Company for several years beginning under the contract for some years past. The service has been presumed by the Narragansett Company to be under the rate filed here subsequently to the making of the contract designated as No. 101. In litigation brought by the Attleboro Company to test the effectiveness of that rate, the local Federal District Court held that the proceedings leading up to the filing of that rate and its being put into effect were not adequate to make that increased rate effective. The Narragansett Company has filed, subsequently to that decision, a new rate, No. 125, and this Commission has independently ordered an investigation on the subject of the rates charged by the Narragansett Company to the Attleboro Company. It is apparent, I think, that the Commission is at this hearing exercising its authority to deal with the contract and the rate. The Narragansett Company feel that it is clear that the Comhas jurisdiction notwithstanding mission points which Mr. Dodge has raised in his former statement, and it may be said too that while the decision of the Court in the Federal case recognized that Mr. Dodge has raised these questions, at the same time it gave no recognition of their

164

being any merit in them. I doubt if the Com-

mission desires me to make any formal argument in regard to the various questions which Mr. Dodge has raised. The fact of the constitutionality of the act, of the public service act, of course, is not a matter that this Commission would feel is open after the act has been in effect ten yearstwelve years. The power to change rates established by contract has been established for a great many years; first, under the interstate commerce law, and is perfectly obvious that if rates fixed by contract, especially if fixed by contract after the law goes into effect that they can not be changed, the utility law is of very slim value and the power can be weakened very materially. Finally, the other point is, the interstate commerce-as is known, the United States Supreme Court has stated the power of Commissions to deal with rates under circumstances analogous to those existing here, so that those legal questions, I assume it will not be necessary to discuss them here at further length. That brings me back to the question of what the Commission could do in this hearing.

The Commission is investigating rates. Practically there are just two rates to be investigated—one service and two rates. The first rate is the contract rate; and the second is the new rate 125; I don't think the intermediate rate 101 is of importance enough at this stage to make it desirable to spend time on that rate. I take it that the question before the Commission is, first, whether the old rate, the contract rate which we will call 68—that was the number under which it was filed—whether that is a fair rate, and if it is not whether we can substitute 125 as a fair rate; and it may be—of

168

course, it is quite open to the Commission to conclude that neither rate is fair. The contract was to put into effect a rate between the two—I didn't mean to exclude that possibility in my statement, but as we have tried in No. 125 to make a rate which is almost automatically fair I have assumed that if the Commission is convinced of the unfairness and the illegality and unlawfulness of 68 it will order 125 into effect. We will then analyze 68 and 125.

Now, 68 was practically a flat rate, and we will show with exhibits already filed with the Commission, show that that rate provides enough income to pay operating costs and pay depreciation and taxes and insurance pretty nearly, not quite; it pays nothing at all on the investment.

170

Now, it may be that Mr. Dodge will question the precise accuracy of that conclusion. I don't know any basis on which it could be questioned but it seems to me that a rate which is so far below a fair rate, giving no return whatever on the investment, little or no return at any rate, is obviously unfair and unjust, discriminatory. Our figures will show-going to 125 for a momentthat rate is based upon the cost of service, including in the cost of service a return of 8 per cent. on the investment. That return is not 8 per cent. on the investment value; it is 8 per cent. on the book value; so that the rate that has been recognized 8 per cent. by the Supreme Court—the Supreme Court of the United States I am referring to-and the rate may be based on replacement value-so that in setting up a rate of 8 per cent on the cost the Narragansett Company seems to us to be pretty well within its rights. There are a good many detailed questions as to just what cost

is and I will come to those in detail; I won't go over them at this moment. We will show the Commission just how we figure the costs in that rate. We might have based the rate specifically on cost but Mr. Dodge has a feeling that might be too indefinite, so we wanted to meet all possible objection and get a rate that would enable us to present clearly the issue. In our point of view the situation is very, very simple. We do not want to charge the Attleboro Company anything more than it should pay but we are a public utility here and our chief duty is to serve the public and that public includes Attleboro in this case. We owe that duty simply to serve them with fair rates; but we also owe the general public here the duty of serving them at fair rates, and it is axiomatic in public utility practice, in order to enable a company to render service it has got to have a return on its investment. It can not meet the constant demand on it unless it can raise money; and it can not raise money unless it has a reserve on its investment; so it has got to earn a return upon its investment. If it does not earn it from Mr. Dodge's client it has to earn it from some one else. Dodge suggests that is a local question which I won't discuss further. I want to mention it merely because one of the issues to be decided by this Commission is whether, in the words of the statute, the present rate, that is 68, is unreasonable, insufficient and unjustly discriminatory; and it seems to me if any rate ever was, this rate is, because that is just what it does mean. It means the public down here has got to pay the cost for providing facilities for service to Attleboro. There was one consideration which was mentioned in the Federal

173

Court and that is, that this is a twenty year long term contract and that benefits deriving from that fact might be expected in the long run to outweigh any temporary loss but I don't think Mr. Dodge will contend that loss continued twenty years will make that any easier to bear, and it looks to me as if this rate being continued for such a term it would make it more unreasonable rather than less.

Mr. Chairman Bliss: You do not question the fact that your company made a mistake in the contract?

Mr. Graustein: That is why we are here; that is just exactly the situation, and we made a mistake which was a very grave mistake. Perhaps it can be excused by the fact of the late war and postwar conditions which resulted in economic upsets, which a great many very wise people failed to provide against and we are among those people; but we say, it is not only our duty but it is the duty of the Commission to remedy that mistake. The public utility laws are devised to protect the general public against discrimination and the result of discrimination, direct and indirect, and whether the discrimination arose in good faith or bad faith the effects are equally injurious to the public. It does not make any real difference. We might have made that contract in 1917 perhaps knowing we were giving them advantage but we would not have done any more harm than by making it in the best of faith; so the question is not whether the contract is a contract or not, the question is whether the rate is fair. The utility law provides clearly, it seems to me, that no contract can stand if the rates fixed in it are unjust and unfair. Now, we have filed with the Commission two statements, and one shows the results based on

176

125, and the other shows the result under No. 68.

Mr. Chairman Bliss: Of course, those matters should be presented through witnesses, and marked

as exhibits as a part of the record.

Mr. Graustein: I will call witnesses. Now, to present this analysis,—there is some further statement which I have omitted to make in outlining the general situation. I might perhaps say this, before calling a witness, that we want to make perfectly clear that this is an issue which affects not only the Narragansett Company but affects the public service. That is not mere theory; that is factsomething like \$50,000 a year at stake at the present rate of consumption by the Attleboro Com-There is no reason to doubt that rate of consumption will grow, especially it may be helped to grow if they continue to get electricity at less than it has cost; at any rate, even apart from any unnatural advantage through a low rate, Attleboro is going to grow, business is going to grow and this forty or fifty thousand a year will increase, and that is a big enough sum to be reflected in some rate of reduction in Rhode Island if this situation is adjusted; I mean the Narragansett Company will be in a position to apply that amount in reduction of its rates. Just what rate should be reduced is, of course, a question of study of the whole rate structure and to be decided at the time of the application of that sum to any one or more of the The Narragansett Company would show a quite noticeable decrease in the rate so that we will bring in evidence that we are dealing with the matter and it has not only a theoretical but an actual and immediate effect on the public in Rhode Island.

180

## JESSE E. GRAY

JESSE E. GRAY is called in behalf of the Narragansett Electric Lighting Company and, having been duly sworn, testifies as follows:

# Direct Examination by Mr. Graustein:

- Q1. Your name is Jesse E. Gray? A. Yes, sir.
- Q2. You are connected with the Narragansett Electric Lighting Company? A. Yes, sir.
- Q3. What is your position with the company? A. Assistant secretary.
- Q4. What is your function, what work do you do? A. I work on the rate schedules and deal with contracts and contractual relations with our customers, and miscellaneous work of that nature.
- Q5. Are you the officer of the company who has chief conduct of the preparation of contracts and rate schedules? A. Yes, sir.
- Q6. How long have you been doing that work?

  A. Approximately twelve years.
- Q7. Did you cause to be prepared a statement of rate No. 125 as filed with the Rhode Island Public Utilities Commission? A. Yes, sir.
- Q8. Is that entitled Basis for R. I. P. U. C. No. 125? A. It is.
- Q9. It has been filed with the Commission? A. It has.

Q10. Have you a copy of that?

Mr. Chairman Bliss: That may be marked as "Exhibit No. 1" in this proceeding.

Q11. Mr. Graustein: Did you also prepare or cause to be prepared an analysis of Schedule No. 68? A. 68?

182

Q12. 68. A. Yes, sir.

Q13. That is entitled "Result of selling electricity under schedule—under 68"? A. Yes, sir.

Mr. Graustein: May that be marked as Exhibit No. 2?

Mr. Chairman Bliss: It may be so marked.

Q14. Mr. Graustein: Now, Mr. Gray, I will go back to Exhibit No. 1 which is the basis for rate No. 125; the first two sheets of that consists of an explanation of the third sheet? A. Yes, sir.

Q15. The third sheet is entitled "Generating

plant data;" is that correct? A. Yes, sir.

Q16. Those three sheets together indicate the unit cost and the actual cost per kilowatt of primary capacity; is that true? A. Primary capacity measured at the East Providence substation—measured at all substations.

Q17. Electricity delivered at the substation? A. Yes, sir.

Q18. Are these figures based upon the book value of the generating plant—are these book value figures correct? A. Yes, sir.

Q19. Do they represent the actual cost or less?

A. They are based upon an appraisal made by the American Appraisal Company in, I believe, 1914, and since that date the actual cost of any additions.

Q20. How do they compare with the present replacement value? A. In most cases they would be considerably less.

Q21. In the aggregate how would they compare?

A. Less.

Q22. The reserve for depreciation is deducted from that book value? A. Yes, sir.

186

- Q23. And the return which this schedule indicates is calculated only from the balance? A. Yes, sir.
- Q24. Are the statements contained in this schedule and the two supporting sheets correct? A. They are.
- Q25. Turning to the next three sheets, the third of these three sheets is entitled "Transformation and transmission data"? A. Yes, sir.
- Q26. The two sheets preceding that are explanatory of that third sheet? A. They are.
- Q27. The third sheet gives the cost per kilowatt of capital cost and the annual cost per kilowatt of the transformation and transmission facilities referred to? A. They do.

Q28. These costs again are based on actual cost?

A. They are.

Q29. Or appraisals? A. Actual cost.

Q30. They are based on actual cost less depreciation? A. Less depreciation.

Q31. Are these actual costs less than replacement cost? A. They are.

Q32. Referring both to this sheet and to the sheet in regard to the generating plant, are the costs after deduction of depreciation as given on these sheets less than, in the aggregate, the replacement costs of the same properties at the present day, less depreciation? A. They are.

Q33. Are the statements contained in the transformation and transmission data, and the two preceding sheets explaining that data—are those statements correct? A. They are.

Q34. The next sheet is a summary sheet showing the total annual charge per kilowatt for service

188

rendered the Attleboro Company under No. 125 rate; is that sheet correctly computed? A. It is.

Q35. Is the conclusion indicated in that sheet, in your opinion, sound and reasonable? A. Yes, sir.

Q36. Based upon correct principles? A. Yes, sir.

Q37. And the application of the principles to the facts is correct? A. Yes, sir.

Q38. Coming to the next sheet, the third sheet following is entitled "Generating and delivery costs;" am I right? A. Yes, sir.

Q39. The two sheets preceding that and the two sheets following it are explanatory of it? A. The two sheets preceding but not the two sheets following.

191 ing.

Q40. The two sheets preceding it are explanatory of it? A. Yes, sir.

Q41. The two sheets following it contain matter bearing upon the charge—those five sheets all stand together? A. Yes.

Q42. Now, that 8 mill kilowatt hour charge is based upon the actual generating costs inclusive, as shown in detail in these sheets exclusive of one mill for what might be called overhead and contingencies? A. Yes, sir.

Q43. Is that a correct statement? A. That is a correct statement.

Q14. The first two sheets bear upon the general calculation of costs, and the last two sheets bear upon that one mill charge? A. Yes, sir.

Q45. Are the statements contained in the five sheets correct? A. They are.

Q46. The statements contained in the first two sheets—I will not ask you to comment upon the last two sheets—indicate the basis for the one mill

charge; if I understand correctly that one mill covered first the income tax, and second overhead. Take out the income tax which presents a large item; second, overhead; and third, contingencies—am I correct? A. No; the income tax is not taken care of in the one mill.

Q47. The overhead, I should say—to put it in this form; the items which are starred on the last sheet are the items which the one mill provides for? A. Yes, sir.

Q48. Those items of contingencies? A. Yes, sir. Q49. What is the total of the items starred in that last sheet? A. 869/1000 of a mill.

Q50. So that is an allowance of only about 13/1000 of a mill for contingencies included in the one mill? A. Yes, sir.

Q51. Now, I will ask you one question which summarizes the questions previously asked; this entire Exhibit No. 1, referring to all of it, is a correct statement of fact? A. Yes, sir. I would like to correct that statement of 13/1000; I think it is 130/1000 to the mill.

Q52. That is right; that is what I tried to say. These sheets indicate then the actual costs on the basis of the figures given of \$19.21 a kilowatt for services that compares with \$19 in No. 125? A. Yes, sir.

Q53. So the charge is 21c less than, the rate charge is 21c less than the figures worked out to? A. Yes, sir.

Q54. And R. I. P. U. C. 125 covers just two years, one \$19 a kilowatt, and the other one is charged per kilowatt hour 8 mills? A. Yes, sir.

Q55. The 8 mills charge covers only the operating costs as indicated on this sheet with an allowance

194

after including the overhead of 13/100 of a mill for contingencies? A. Yes.

Q56. That is correct? A. Yes, sir.

Q57. There is no duplication in those charges? I mean there are no items which figure in both? A. No, sir.

Q58. So that when you get both-both the \$19 and the 8 mills-you haven't been overpaid? A. No. sir.

Q59. The two together make adequate payment, one for your facilities and the other for operating costs? A. Yes.

Q60. Now, will you turn to Exhibit No. 2? Exhibit No. 2, Mr. Gray, consists of five numbered sheets followed by three sheets of tabulated data: that is correct? A. Five unnumbered sheets followed by three sheets.

Q61. Five sheets of text? A. Yes.

Q62. Followed by three sheets of tabulation? A. Yes, sir.

Q63. The purpose of this exhibit is to compare, is to show just how much schedule 68 pays the Narragansett Company; is that correct? A. Yes, sir.

Q64. Which shows that, both for 1923 and 1924, estimated: is that correct? A. Yes, sir.

Q65. And broadly speaking on analysis it will show that in any other year before; the chargewas the charge under 68 adequate to pay for operating costs, depreciation and taxes? A. That is correct-and insurance.

Q66. In other words, stated in another way, was the charge adequate to provide for a return, and interest on the investment, or was there a loss by meeting any charge in the investment? A. There was.

197

Q67. Now, to take this up in detail; the first paragraph contains a computation, and showing what the charge would have been in 1923 under rate 68? A. Yes, sir.

Q68. That was \$103,000; as shown in the second paragraph there were credits which would net the amount \$97,000? A. Yes, sir.

Q69. Is that correct? A. That is correct.

Q70. Are the statements in the two paragraphs correct? A. They are.

Q71. The next paragraph shows—the first two paragraphs show the costs of service in '23, I mean return from the service in '23? A. The minimum received.

200

Q72. The next paragraph, going on, decreases the cost of that service but immediately the last paragraph, on the next page, indicates that the operating cost of the service was \$76,000; is that correct? A. Yes, sir.

Q73. In all my questions I am ignoring fractions of a thousand.  $\Lambda$ . Yes, sir.

Q74. The next three paragraphs taken together show the cost of the different plants facilities required for giving this service? A. Yes, sir.

Q75. And they show both the gross cost, total cost, and the cost per unit of service, that is, per kilowatt service? A. Yes, sir.

Q76. They show the amount of those costs which has to be allocated to the Attleboro Company upon the basis of what it demands? A. They do.

201

Q77. And accordingly the paragraph at the top of the third page summarizes that information and indicates that the total cost in respect to these facilities, exclusive of any return on investment, is \$24,000? A. Yes, sir.

Q78. And indicates a loss of \$4000 before there is any return on the investment? A. Yes, sir.

Q79. Are those figures correct? A. Yes, sir.

Q80. Are the conclusions drawn correct? A. They are.

Q81. Your answer is applied to the entire analysis down to that point? A. Yes, sir,

Q82. At that point we start, for instance, a division of this schedule which deals with 1924-down to that point we have been dealing with 1923; am I right? A. Yes, sir.

Q83. The next following paragraph, the one in the middle of the page, shows what the net receipts will be in 1924 as estimated on this basis, if the 68 schedule remains in effect? A. Yes, sir.

Q84. That shows \$103,000 as the total receipts; the next paragraph to the one at the bottom of the page indicates the operating costs in '24, later distributing \$84,000 out of that \$103,000? A. Yes. sir.

Q85. Leaving only \$19,000 for all costs in connection with facilities used on plant and so forth? A. Yes, sir.

Q86. The next three paragraphs, those covered by page 4, indicate that without any charge for the investment that depreciation, taxes, insurance and the maintenance of lines will exceed this \$19,-000; is that correct? A. Yes, sir.

Q87. Showing that there will be a loss of over \$6000 without any return on the investment in 1924; is that correct? A. Yes, sir.

Q88. That summarizes - that completes the analysis to that point for the year 1924; are the figures given in that analysis correct? A. Yes, sir.

203

Q89. And the conclusions indicated are correct?

A. Yes, sir.

Q90. The next paragraph shows what the return for the investment should be on the basis of 8 per cent. on net book value after the depreciation; is that correct? A. It is; yes, sir.

Q91. After allowing just that 8 per cent. on the net book value, schedule 68 will show a loss for 1923 of \$45,000? A. Yes, sir.

Q92. And 1924 will show a loss of \$50,000? A. Yes.

Q93. And that is the failure of 68 to provide operating costs and charges of 8 per cent. on the net book value after depreciation? A. Yes, sir.

Q94. The last paragraph has to do with the method of calculation of applying 68? A. Yes, sir.

Q95. Then follow the three sheets giving data as to the plant, what I have called the facilities employed for service to the Attleboro Company; these sheets give the same data for 1923 that the corresponding sheets included in Exhibit 1 give for 1924; is that correct? A. Yes, sir.

Q96. Are these figures correct? A. Yes, sir.

Q97. Are they based upon correct principles? A. They are.

Q98. Are the results indicated sound? A. They are.

Q99. Now, just to make sure against any omission, take this Exhibit No. 2 as a whole; is it correct? A. It is.

Q100. The figures given it, correct? A. They are.

Q101. The principles on which they are based, correct? A. They are.

206

209

210

Q103. And the conclusions indicated are sound?

A. They are.

Q104. Now, coming back to the general question on the new rate, what was the new rate service charge per kilowatt, \$19 per kilowatt of demand per year? A. (R. I. P. U. C. Nos. 68 to 101 produced.)

Mr. Chairman Bliss: They may be marked "Exhibit 3" in this proceeding.

Q105. Mr. Graustein: The service charge is \$19 a year a kilowatt? A. Yes, sir.

Q106. What are your actual costs for 1924 on your best estimate? A. \$19.21.

Q107. Per kilowatt? A. Yes.

Q108. In other words, the charge under the rate is 21c less than your estimate of the actual cost? A. Yes, sir.

Q109. And that actual cost figures no profit for the company except 8 per cent. on the return net book value after depreciation? A. Yes, sir.

Q110. Next, what is the charge per kilowatt hour

under that? A. Eight mills.

Q111. How does 8 mills compare with the estimated generating cost of 1924, including overhead?

A. That practically represents our general cost.

Q112. What maintenance is there in the contingency? A. 130/1000 of a mill.

Q113. A little over 1/10 of a mill? A. Yes.

Q114. Coming to the general question again as to the effect of 68; how much are you losing under the old rate as compared with your actual costs, how much a year? A. In 1924, \$50,918.37.

Q115. How much did you lose in 1923? A. \$45,-

611.33.

# Q116. Who loses that money?

Mr. Dodge: The company loses it. I don't suppose he can go beyond that.

Mr. Graustein: Let me ask.

Mr. Dodge: I object.

Mr. Chairman Bliss: I think it is clear the company is losing the money. If the witness wants to testify as to what could be done with the equivalent amount of money, that is another matter.

Mr. Graustein: That is what I am leading up to.

Mr. Chairman Bliss: I do not think you ought to refer to that particular money—what can be done with the equivalent amount of money?

Mr. Graustein: I will withdraw the question and ask you this:

Q117. If the company were in receipt of that money would it have any effect upon—effect upon the Company's rate schedule for service to its other customers? A. It would.

Q118. Is that sum sufficiently large to have a material effect on the rate schedules? A. It would have a material effect.

Q119. I won't ask you to what particular rate schedules that amount of money might be applied to reduce, but I would like to ask you for just illustration how much of a difference that money would make if all applied to a residental light schedule? A. Nearly one-half a cent a kilowatt hour.

Mr. Graustein: That is all, Mr. Gray.

212

#### Jesse E. Gary-Cross

# Cross Examination by Mr. Dodge:

Mr. Dodge: I wish to put in evidence, Mr. Chairman, the papers relating to the approval of the contract in 1917.

Mr. Graustein: Are you to cross examine Mr. Gray?

Mr. Dodge: Yes; I would like to put those in first because I would—No. 315 on your docket does not seem to contain a copy of the contract itself. I want to put the contract in evidence, and in the letter which accompanied it, it states:

215

"We are handing you herewith the rate covering special rate for electricity to be sold the Attleboro Company"——

and then goes on to refer to the contract.

Mr. Chairman Bliss: You (Mr. Carmichael) may get that contract.

#### BRIEF RECESS.

#### AFTER RECESS.

Mr. Chairman Bliss: It does not appear that the contract itself was filed with the Commission.

> Mr. Dodge: I thought there was some doubt about that. Suppose I take one of the originals——

> Mr. Chairman Bliss: It is very desirable that the contract should be placed in evidence here.

Mr. Dodge: I will offer, Mr. Chairman, the letter of May 14, 1917, from the Narragansett Electric Lighting Company to the Commission accompanying the filing of rate No. 68.

Mr. Chairman Bliss: That may be marked as "Exhibit No. 4" in this proceeding.

Mr. Dodge: I will offer one of the originally executed copies of the contract of May 8, 1917, between the Attleboro Company and the Narragansett Company.

Mr. Chairman Bliss: It may be marked as "Exhibit 5", and a copy may be substituted for it and marked Exhibit 5.

Mr. Dodge: The application referred to in the letter was acted upon by the Public Utilities Commission. I desire to read into the record the order of the Commission. It reads as follows:

"On application of the Narragansett Electric Lighting Company for authority to grant a special rate, upon consideration it is ordered that for good cause shown said Narragansett Electric Lighting Company be, and it is hereby authorized to grant a special resale rate to the Attleboro Steam & Electric Company at the State Line between Rhode Island and Massachusetts, said rate to be shown in the tariff of said Narragansett Electric Lighting Company, R. I. P. U. C. No. 68, filed with and made a part of said application."

May 23, 1917, is the date of that order. Now, if you have a copy of that rate, put that in.

Mr. Allen: 68?

Mr. Dodge: Yes. I show this as the next exhibit, it is entitled R. I. P. U. C. No. 68, Nar-

218

## Jesse E. Gary-Cross

ragansett Electric Lighting Company special rate to Attleboro Steam & Electric Company.

Mr. Chairman Bliss: That may be marked as "Exhibit No. 6." I think a copy of that is attached to the notice that was served on the Attleboro Steam & Electric Company.

Mr. Dedge: Yes.

CQ120. Now, Mr. Gray, rate No. 101, which was the rate that was the subject of litigation in the district court, was a rate which was designed, like the rate now before the Commission, to return to the Narragansett Company its costs and a fair return? A. Yes, sir.

CQ121. And it was made up on a basis similar to that on which your rate of 125 is made up? A. Yes, sir.

CQ122. Now, under rate No. 101, which was your admitted new rate of 1921, the Narragansett Company received from the Attleboro Company, from July 1, 1923, to the end of the year, payments for the electricity on the basis established by that rate and not on the basis established by rate No. 68 and by the terms of the decree? A. It didn't receive anything under that schedule.

CQ123. Not ultimately; but you are aware, are you not, of the fact that under the terms of the temporary injunction we were obliged to pay at the rate of No. 101 for the last six months while the litigation was on and that the excess was afterwards refunded under the final decree? A. Yes, sir.

CQ124. And the amount of excess thus refunded was about \$12,000? A. I have not that figure in mind.

222

CQ125. You billed electricity to the Attleboro Company at the rate of No. 101 cost plus a fair return during those last six months, and if it did turn out as I can show is the fact that that rate exceeded the contract of 1917 rate by only \$12,000 for the last six months, how is it that you now say that for the year 1923 the contract operated or cost some \$50,000 to the Narragansett Company? A. The schedule 101 was billed under the 2,000 kilowatt demand which is far below the actual demand of the Attleboro Company.

CQ126. In Schedule 101 you undertook to get at the actual cost of the service, did you not? A. Not as far as that demand was concerned; that demand was an accrued demand and had never been changed.

224

CQ127. Right down through 1923? A. Yes.

CQ128. Do you think it fair to demand that in 3860? A. Yes, sir.

CQ129. In your bills which you rendered under the 1921 rate last year you gave, in great detail accompanying the bills, the actual cost of the service, did you not? A. No, sir; not as far as the demand was concerned.

CQ130. Have you a copy of the 1921 rate, rate No. 101? A. Yes, sir.

Mr. Dodge: Now, that rate I would like to have marked as an exhibit—that is a copy that was attached to the notice—then we may assume that rate 101 is before the Commission.

225

Mr. Chairman Bliss: Yes.

CQ131. Mr. Dodge: The rate which we were litigating about last summer, had the Narragansett

Company been successful in that litigation, would unquestionably remained in effect and been satisfactory to your company, would it not? A. The demand would have been increased.

CQ132. Where is the reference in this to the demand—in the rate? A. You will read paragraph A of the rate of service charge of such an amount as will equal the cost to the Narragansett Company, the taxes, insurance, depreciation, obsolescence, and any other fixed charges, and net the Narragansett Company an 8 per cent. dividend upon that portion of the cost of the plant which can properly be allocated to the general cost of electricity, to such electricity to the Attleboro Company. That part of the rate determines the demand and so-called service charges.

CQ133. That is substantially identical with your proposed new provision? A. Yes, sir.

CQ134. And it was under that provision which is in terms substantially identical with your proposed new provision that you rendered bills throughout the period, from 1921 to the end of 1923, to the Attleboro Company? A. Not in substantial accord with that.

CQ135. You rendered them under that rate? A. Under that rate but not in accord with section A. The demand was too small.

CQ136. Is not that something that you have since decided that you ought to claim? A. No, sir; that is your opinion—the Attleboro Company.

CQ137. I will ask you again; don't you know that the bills that were rendered under that rate No. 101 purported to cover the cost and a fair return? A. No, sir; they did not.

227

CQ138. And that you never claimed until this hearing, until the preparation of this final Exhibit No. 2, that there was any such loss as \$50,000 per year under that old contract? A. We did.

CQ139. You did? A. Yes; the demand being low was known to the Attleboro Company.

CQ140. That is not what I asked; did you ever make it known to them you were losing \$50,000 a year under the old contract? A. I would not say that that was made known directly to them.

CQ141. Didn't you personally, yourself, say to either Mr. Fales or Mr. Goldthwait, it more than paid the costs but was yielding perhaps only 2 or 3 per cent. return instead of 8 per cent. to which you felt you were entitled? A. I have no recollection of making such a statement.

CQ142. Don't you know that was the position taken by your company in dealing with the Attleboro Company? A. I do not know that that was the position.

CQ143. Just to make it perfectly clear let me ask you if the rate No. 125 is not substantially the same in its basis as the rate No. 101? A. On the basis it is substantially the same.

CQ144. Except you have fixed your kilowatt hour at 8c and have limited 8 mills—and have limited the arrangement to one year instead of carrying it through until 1938, as this one did? A. I might say that the data used in arriving at the rate is substantially the same.

CQ145. The theory is the same? A. The theory is the same.

CQ146. I suppose this method of figuring shown in Exhibit 1 is a matter about which opinions might

230

differ, is it not? That is, there are many elements in that computation? A. I would not say the opinions of those competent to know would differ materially.

CQ147. You don't think they would? A. No, sir.

CQ148. You have assumed a total demand or peak load, as perhaps you call it, of how much for the Narragansett Company? A. For 1923, 3600 kilowatts; for 1924, 3840 kilowatts.

CQ149. And you have apportioned that to a total of what? A. I think I don't understand the question.

233

CQ150. Well, you charge that proportion with certain expenses to the Attleboro Company? A. Yes, sir.

CQ151. And the proportion is 3600 to what? A. To the primary peak of this generating station.

CQ154. A sum of 64,000? A. In 1923 the primary peak was 55,000 in January and 63,970 in December; and in 1924, 63,970 in January and 64,615 in December.

CQ155. That takes into consideration only your primary load? A. Yes, sir.

CQ156. The Attleboro Company takes no secondary current? A. No, sir.

CQ157. You do dispose of a great deal of second-234 ary current to other companies? A. Yes, sir.

CQ158. At a profit? A. Yes, sir.

CQ159. Which you do not take into consideration at all in apportioning these expenses? A. The secondary electricity pays no capital charges so far as the generating station is concerned.

CQ160. That, I think, is an answer to my question, that the secondary current is not taken into

consideration at all here and that your company disposes of large quantities of it at a profit? A. I can not answer that question with a yes or no because "here" means undoubtedly the whole schedule.

CQ161. You see what we are talking about-

Mr. Graustein: He differentiates generating station from substation and transmission and delivery lines.

CQ162. Mr. Dodge: I understand that, with reference to that table apportioning the returns from the generating plant, you take into consideration only the primary current? A. That is right.

CQ163. Now, when we come to transformation and transmission you take into consideration are the current that passes through your substation? A. Through the East Providence substation; yes sir.

CQ164. As to the generating costs which constitute considerably more than half of the \$19 called for in your new rate, you do not take into consideration secondary current at all? A. Yes, sir.

CQ165. As to the return on the generating plant?

A. You said as to the generating cost.

CQ166. I am speaking about the return on the generating plant; if I did not state that accurately, I will correct it. A. Will you ask the question again, please?

CQ167. I think I have asked it before, but that there may be no doubt I will ask it again; I understand that of your \$19 per kilowatt of demand which you charge to the Attleboro Company in this proposed new rate more than one-half is made up of a return upon the investment in the generating

236

plant, and in apportioning that to the Attleboro Company you do not take into consideration the secondary power which is generated at all? A. That is right.

CQ168. That is right? A. Yes.

CQ169. Now, in apportioning the other expenses to the Attleboro Company you treat the Attleboro Company solely on the basis of the amount of current that it takes as compared with your other current that is sold? A. I think it would be necessary to differentiate between the electricity charge and the service charge in that question.

239

CQ170. Let us do that; you take your second table in Exhibit 1, which is headed "Transformation and Transmission Data," and which leads up to a figure of \$2 and some cents as the item that ultimately comes to make up your \$19. I am not quite clear that I understand just how that is figured; all that is based upon costs or book values on a certain part of your equipment, is it not? A. Yes, sir, depreciated.

CQ171. And how do you get at the proportion which you attribute to the Attleboro Company? A. We take such part as is equal to the ratio between the Attleboros taking at the East Providence substation and the total electricity delivered through such substation.

240

CQ172. And that is the substation at East Providence? A. Yes, sir.

CQ173. Where is the statement of the total amount taken through there? I think I saw it on the second page—estimated total load? A. That is correct.

CQ174. 13,000? A. Yes, sir.

CQ175. Now, that electricity goes through the East Providence station to a thousand of customers, does it not? A. Yes, sir.

CQ176. And in apportioning the costs to Attleboro you have treated Attleboro exactly as though it were a thousand customers instead of one; you have dealt solely with the amount of electricity? A. The amount of electricity passing through the East Providence substation is the total in each case.

CQ177. And if the Attleboro Company, instead of being a single wholesale customer, were a thousand retail customers costing your company a lot more in the way of various overheads, this charge would be the same? A. That statement is not correct as far as the East Providence substation is concerned; that would cost more than a thousand customers. There is no difference, as far as the East Providence substation is concerned, whether electricity passing through such substation is ultimately delivered to a thousand customers or one customer which has a bulk delivery at the East Providence substation.

CQ178. Mr. Gray, that is a matter of argument but it is not in answer to my question; I said overhead charges of a thousand customers would be much more than the overhead charges to the Attleboro? A. We were referring to the East Providence substation; there is no difference at the East Providence substation.

CQ179. That is, you say this is the cost of maintenance of that station? A. Certain equipment between the generating plant up to and including the East Providence substation.

242

## Jesse E. Gary-Cross

CQ180. Where, in your figures, have you taken into consideration the fact that the Attleboro Company is a single wholesale customer and not a group of 5000 individual customers so charged in your calculation? A. In this place right here (indicates).

CQ181. This is based on the cost of supplying the Attleboro Company which is a single company? I understand that those figures up to date would be exactly the same if it were 1000 individual customers or 5000. A. So far as the East Providence substation is concerned.

245

246

CQ182. Now, I say where in your later calculations or estimated cost have you taken into consideration that your overhead should be distributed in so far as it goes to the Attleboro Company at all on the basis that it is one wholesale customer and not a number of thousands of retail customers? A. There is no difference so it can not be taken into consideration.

CQ183. You haven't taken that into consideration anywhere then? A. I can't answer that question without giving a wrong impression.

CQ184. Can you point to any table where that consideration has been dealt with by you? A. Throughout the entire calculations this is based upon the cost of supplying the Attleboro Company with electricity. The Attleboro is one company. The costs due to one company are the only costs considered, therefore, there are no high overheads which are due to a thousand and one customers taken into this case,

CQ185. I understand, but will you point to any total where the apportionment of the cost to the

Attleboro is diminished at all from the fact that it is a wholesale customer and not 5000 retail customers, taking the same total quantity? A. That can not be answered.

CQ186. Is there any such table? A. There should be no such table.

CQ187. I have not asked you that; the first question is whether there is any such? You say you can not call attention to any table where there is any difference, any difference at all in your result from what it would have been if this had been 5000 customers? A. All the tables.

CQ188. Do you really mean that, Mr. Gray? A. Yes.

248

CQ189. All right; tell me on your table Generating plant data what the difference is in favor of the Attleboro because it is a whole customer? A. On which table?

CQ190. That table entitled Generating plant data. A. There is no difference in the cost of applying to one large customer and a multiplicity of small customers so far as that table is concerned.

CQ191. Then it is not correct to say that in every table here the difference is shown or that there is a difference? A. It is correct to say that all the difference there should be is shown.

CQ192. That is another question—— A. The way your question is framed I can not answer it without giving a wrong impression.

CQ193. I don't think you will give a wrong impression to the Commission. I simply want to find out where zero is taken into consideration because you say there ought to be no difference, but just where, anywhere in your table which is de-

signed to get at the cost of serving the Attleboro—anywhere in your tables is there any distinction whatever made between—due to the fact that it is a wholesale customer? A. That question implies that there is a difference, the way you put it. I answered it one way or the other, but while there is a difference, there is no difference as far as these figures are concerned.

CQ194. I will accept that answer to that question; then you say throughout in estimating the cost you have estimated the Attleboro to bear the same proportion of cost which it would if it were 5000 or 10,000 individual customers taking the same quantity of electricity through that East Providence substation? A. Why, it is provided they should bear such costs.

CQ195. There is no table here and nothing in your computation anywhere wherein any difference is made in favor of Attleboro because it is a wholesale customer? A. That is the same question.

CQ196. The reason being you think no such difference should be made anywhere? A. No; I don't think that is right.

CQ197. What I want to get at is, if there is any table here anywhere in your figures which shows any such distinction I would like to know where the table is? Answer that, can't you, Mr. Gray? A. Not and give the impression which I desire to give as the correct impression.

CQ198. Will you forget, for the moment, the impression? We all know you claim there should be no difference. I understand, as a point of fact, that your tables do not make any difference? A. Because there is no difference so far as certain data is concerned, there should be a difference so far as other data is concerned.

251

CQ199. That is what I want to find out; give the data where you have made a difference on that ground. It is not in the generating plant data; it is not in the transformation and transmission data; is it in the generating and delivery cost? A. There would be a much larger amount possible per kilowatt hour to a small customer of the general expense.

CQ200. The question is whether the difference is shown in your table headed Generating and delivery costs? A. There is no difference there.

CQ201. Then that comes to the last table, Details of general expenses for 1923; is there some distinction made there because of Attleboro being a wholesale customer? A. No; there is no distinction.

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254

CQ202. Then it is exact to say that nowhere in Exhibit 1 is such distinction made? A. Except that statement there should be no distinction.

CQ203. I am not asking you that; your counsel can bring that out. I want to bring out some facts favorable to my side; will you please answer that question? There is not anywhere in Exhibit 1 any distinction made in your return from the property or in your apportionment of general expenses which works any distinction because Attleboro is a wholesale customer? I am asking you simply about the fact concerning your table? A. No distinction is or should be made.

255

CQ204. Well, if you are bound to answer more than the question I put I will let you, if you want to argue the case, but I think we will get along faster if you will confine yourself to my questions. This second table, Exhibit 2, was, I think, handed

## Jesse E. Gary-Cross

in at the Attleboro Company's office only on Thursday afternoon, was it not? A. I think that is right.

Mr. Dodge: I find myself in some difficulty in dealing with that because neither our accountant nor I, Mr. Chairman, saw that until this morning. We may have to ask the right to submit some comments on that, some figures in writing, within a few days.

Mr. Chairman Bliss: That may be done.

CQ205. Mr. Dodge: I understand, Mr. Gray or do I understand correctly that this new rate is supposed to yield the Narragansett Company some \$50,000 a year more than the contract rate? A. Yes, sir.

CQ206. So that it would have yielded a very much less excess than that in 1922? A. I haven't figured it for 1922.

CQ207. Well, you know, don't you, that the difference between the contract rate and rate No. 101, as applied to Attleboro for 27 months down to the time when the litigation was finally concluded, was only about \$40,000? A. I have stated that schedule 101 was billed on an incorrect demand.

CQ208. Schedule 125 is based on information, upon information which you have since acquired? A. No; we had the information at that time but schedule 101 was billed on a 2000 kilowatt demand.

CQ209. The fact is that the difference between rate 68 and rate 101, as applied and as billed by you to the Attleboro Company, was only about \$40,000 for 27 months? A. Yes.

CQ210. How much of this rate 125 is anticipative or estimated return to the stockholders upon a fair value of the property? A. Eight per cent. per annum.

CQ211. How much does that amount to in dollars and cents? A. \$38,531.87 for 1924.

CQ212. Some very slight modification of your figures would, of course, entirely eliminate that \$4000 or \$5000 loss which your figures show? A. It would not take a great deal of modification, no.

CQ213. I mean, we are dealing with figures that are so large that a comparatively small change in some of your elements would show the old contract not to be operating at a loss but merely at an insufficient profit? A. You mean loss so far as expense other than return is concerned?

CQ214. Yes. A. Yes, sir.

CQ215. By the way, what was the total production of electricity of the company in 1923, the Narragansett Company? A. I have a figure here which shows the total output of our plant, as measured at various substations and at the generating plant—it amounts to 352,195,227.

CQ216. And how much of that went to the Attleboro Company? A. Measured at the same point, 10,171,600.

CQ217. That is about 1/35 of the total product of your company? A. Yes.

CQ218. Now, the production of the expenses which you are charging to the Attleboro Company in your rate is much more than 1/35, is it not? A. Certain expenses, yes.

CQ219. Well, of those generating plant expenses? A. Fixed or capital charge expenses, yes.

960

# Jesse E. Gary-Cross

CQ220. I take it that one great reason why you say that your company needs more money from the Attleboro Company is because of the great increase in the plant since the Attleboro contract was made? A. No, sir.

CQ221. That is not an important factor? A. No, sir.

CQ222. Don't you know that the average unit cost, instead of being \$90 was \$45 when this contract was made? A. Yes.

CQ223. So that to the extent in which 90 has to 45— A. If you say the unit cost the answer is yes.

263 CQ224. Now, those unit costs are charged primarily because of the great additions made to your plant at the high prices obtained since the war?
A. For the Attleboro and other companies, yes. CQ225. Primarily for the Attleboro Company?
A. No, sir.

CQ226. Have not the additions which you have made to your plant during the last five or six years had to do with the New England Power Company supply? A. No, sir; the Attleboro load has grown as fast as our other load.

CQ227. Have you not built large additions to your plant primarily for the New England Power Company? A. No, sir; we have not.

CQ228. Have you done anything because of the large amount of electricity you have been supplying them? A. Not to the plant, no.

CQ229. Not to the plant at all? A. No, sir.

CQ230. You say that double the average unit cost in the last six years has been due in any sense at all to the Attleboro Company? A. It has.

CQ231. In what way? A. Because their load has grown as the average load has of the Narragansett Company.

CQ232. Is not your plant today adapted to an output which is more in excess of the daily needs than was the situation in 1917? A. No, sir.

CQ233. It is not the fact? A. No, sir.

CQ234. It is not overdeveloped at all? A. No, sir.

CQ235. Not even in proportion to 1917? A. To show that it is not overdeveloped we are contracting for boilers which will be installed this year.

CQ236. When and where was the Attleboro demand taken, this 3840? A. At the East Providence substation.

200

CQ237. And where? A. Pardon me.

CQ238. Where? A. That was measured at East Providence on February 3, 1924, by curb drawing instruments.

CQ239. And when and where are your monthly figures of the peak primary load of the Narragan-sett Company taken? A. 1924 they were estimated being subsequent to the dates when they could have been taken. We expect ordinarily the primary peak to be early in the year, December.

CQ240. When did you last get an actual figure? A. The actual figure obtained by us in December, and that was subsequently increased due to the reservation made by one of our customers which increased the primary power of his plant.

267

CQ241. What was the actual figure for December which, I understand, is the last time you got an actual figure? A. That is the figure contained in this exhibit.

# Jesse E. Gary-Cross

CQ242. That is, the figure of January 1, 1924, 63,970? A. Yes, sir; 63,970.

CQ243. And that figure with a slight increase you have taken for the entire year 1924? A. That is right.

CQ244. What was the figure at the beginning of 1923? A. 55,000.

CQ245. And at the end of 1923?—63,970. A. That is correct.

CQ246. Then for the year 1924, while you have assumed a plant increase, book value of the plant, you have assumed substantially no increase in your peak primary load? A. Not for that year.

CQ247. The assumption that no substantial increase there would, of course, diminish the proportionate cost to the Attleboro Company of electricity as you figured it? A. If there were any increase we would expect to find it in January.

CQ248. That does not answer my question; I mean as a matter of mathematics increasing the peak primary load would decrease the cost to Attleboro? A. That is right.

CQ249. What proportion of your output goes to the New England Power Company? A. I haven't that figure available. I would say a very large proportion.

CQ250. Can't you be a little more definite than that, Mr. Gray? A. I might say 50 per cent.; that is only a rough idea.

CQ251. Fifty per cent.? A. Yes.

CQ252. And that business has developed entirely since the contract of 1917? A. I haven't in mind now without looking at the figures when that has been developed. I could probably consult figures and answer that question.

269

CQ253. You are not prepared to say it was not entirely after 1917? A. No.

CQ254. Now, you are asking Attleboro here to pay a part of the cost to handling business for that enormous new customer that you didn't have in 1917, are you not? A. No, sir.

CQ255. Not at all? A. No, sir.

CQ256. You say the handling of the business to that customer who now takes at least 50 per cent. of your output has not caused you to develop your plant vastly more than you would have if that customer hadn't come in? A. It has not.

CQ257. It has not caused any increase? A. No, sir,

272

CQ258. You haven't got a new, a single new appliance or part of your plant which was put in because of that customer? A. Not that is given any consideration in these figures.

CQ259. Have you eliminated a part of your plant from these figures? A. Oh! certainly.

CQ260. Of that generating, cost of the generating plant? A. Do you mean our entire plant or the generating plant?

CQ261. I am speaking now of the generating plant. A. Then there has been—nothing has been done for the large customer.

CQ262. So that your generating plant is exactly what it would have been today if you hadn't got that New England Power Company business? A. That is right.

CQ263. Then you would have been generating, or qualified to generate, a tremendous excess over what you needed? A. It is customary to have that.

CQ264. I am not asking you what was customary—what would be, if that was the cause of the tre-

mendous excess capacity? A. No, sir; I would not say so.

CQ265. You should cut out 50 per cent.? A. If we were we would not be putting in boilers this year.

CQ266. Speaking of what there is there now. A. We have not an excess capacity over and above the needs to carry our primary load.

CQ267. Is that because the New England Power Company takes mainly the secondary current? A. That is right.

CQ268. How much of the current it takes is secondary current? A. That is impossible to state because they purchase both primary and secondary.

CQ269. Can you give us some idea? A. I can give no idea because it is impossible to calculate.

CQ270. That could not be done? A. It couldn't be done.

CQ271. You can not say how much of the secondary current you do sell in the course of a year?

A. No, sir; not as far as that particular customer is concerned.

CQ272. How about the high cost of installation put in for the New England Power Company's business? A. I have stated there was nothing put in new for the New England Power Company.

CQ273. No installation? A. I said so.

CQ274. I did understand you to say that most of the power that the New England Power Company takes is secondary? A. I didn't make that statement.

CQ275. Then I misunderstood you. A. I state I can not tell how much was secondary and primary.

275

278

CQ276. Is it not a fact that most of it is secondary? A. I didn't make that statement.

CQ277. Is it not a fact? A. How can I tell if I don't know which was which?

CQ278. I thought you might at least approximate to it. A. Not if I can not separate them, I can not tell which is more.

CQ279. Then you can not give the Commission any notion whether they take more secondary power than they do primary? A. No.

CQ280. You can not help us at all on that point?

A. I can not.

CQ281. But whatever secondary power they take and however large it may be, and however profitable to you it may be it does not affect at all the proportion of the generating plant cost which you are charging to the Attleboro Company? A. The capital charges, no.

CQ282. That is, you assume that the New England Power Company, to the extent that it gets secondary current, need not contribute anything towards the capital charges of your generating plant? A. That is true.

CQ283. Similarly with other secondary current users? A. Yes.

CQ284. Who are such other users, or some of them? A. The Pettaconsett Pumping Station.

Mr. Graustein: I don't know to what extent 279 the Commission wants to go-

Mr. Chairman Bliss: I think the question is a proper one.

A. The Pettaconsett Pumping Station, the East Providence Water Works, the Westerly Light & Power Company, Field's Point Manufacturing Company—that is all that I can recollect at the present.

CQ285. Mr. Dodge: Some of those are sub-companies of the Narragansett? A. One of them.

CQ286. How about other sub-companies of the Narragansett? A. They take only primary power—the Wickford, Narragansett and Seekonk, only take primary power.

CQ287. How many other electric companies are there over the demand of 3,600 kilowatts or over?

A. Where?

CQ288. Taking power from the Narragansett Company. A. None.

CQ289. What is the largest one next to the Attleboro? A. I couldn't say, offhand, which company.

CQ290. Is there any one that takes 1,500? A. No.

CQ291. 1000? A. No.

CQ292. They are all small? A. They are smaller, very much smaller.

CQ293. So that this new rate 125 is really aimed solely at the Attleboro Company? A. It was designed particularly with the Attleboro Company in consideration.

CQ294. And you put it in the form of a general rate primarily to avoid some legal difficulty that may be thought to arise if you simply made it applicable to the Attleboro Company alone? A. We put it in the form of a general rate so as to be able to take in all utilities.

CQ295. Was that your prime motive? A. I couldn't say whether it was the prime motive.

CQ296. You put it in this form so as to avoid legal difficulty, didn't you? A. That might have been the reason.

282

CQ297. You haven't got any company in sight, or within a thousand miles of being in sight, an electric company that is going to take 3,000 kilowatts of your power, have you? A. We haven't now. I would like to correct a previous statement I made in regard to having no public utility of a size equal to this, and change that statement to—that we have a public utility customer of much larger size.

CQ298. That is the New England Power? A. That is the New England Power Company.

CQ299. I should have limited my question to electric lighting companies? A. I don't know the difference between electric lighting and the New England Power Company, or the Rhode Island Power Transmission.

CQ300. Which is your customer? A. We sell to the Atlantic Power Company.

CQ301. The Atlantic Power Company? A. Yes. CQ302. What does that do with the current? A. We don't trace the current if it is billed to the Atlantic Power Company.

CQ303. You know where it goes, don't you? A. We presume that some of it goes in various directions, some going north through Pawtucket, some of it into Massachusetts, some to Fall River.

CQ304. You sell any power direct to the New England Power Company? A. Not under that name; we have no contract with the New England Power Company as such.

CQ305. You have already told us they get some 50 per cent. of your current? A. I am using the name interchangably, referring to the transmission——

CQ306. The New England Transmission Company feeds current on the New England Power

284

Company, does it not? A. Presumably so much as is not utilized in Rhode Island.

CQ307. As the Rhode Island Transmission Company it is an electric lighting company? A. I believe they are.

CQ308. Then this rate is applicable to that? A.

If they should so desire to take the rate.

CQ309. They have an alternative, which we haven't? A. You have an alternative; you could take this rate or any other rate, on file, with this

company.

CQ310. Do you have a contract with the Rhode Island Transmission? A. We have with the Rhode Island Electric Power Company; presumably they sell power to the Rhode Island Power Transmission Company.

CQ311. You know whether they do or not? A.

I assume that they do.

CQ312. Was notice of this hearing given to them?

A. I didn't assume they were particularly interested.

CQ313. Notice was specifically provided for to the Attleboro Company; all I am coming to is this—we can shorten it right off, Mr. Gray, if you will tell us whether or not, by calling attention to the Atlantic, whether the Rhode Island Transmission Company, you meant in any way to qualify your statement that this rate is a rate made primarily for the Attleboro Company? A. This rate is made with the Attleboro primarily in consideration; it is assumed that they will be the first customers to be supplied under this rate.

CQ314. And so far as you can see the only one?

A. We know of no other at the present time.

CQ315. So that this rate does not affect the Atlantic Company or the Rhode Island Transmission,

287

or the New England Power Company? A. Not unless they should take, purchase under this rate. CQ316. Which you don't expect them to do? A. No.

CQ317. I say you don't expect—— A. We don't expect, no.

CQ318. As a matter of fact, this rate is not applicable to a customer who takes a large quantity of secondary current, is it? A. No; that would be a higher price than secondary electricity would be sold for.

CQ319. So that the contract is totally inapplicable to the Atlantic situation? A. So far as the surplus of electricity is concerned.

CQ320. And there is nothing in this contract, this contract or this rate rather, this rate relates only to primary current? A. Primary current.

CQ321. Now, you have said, Mr. Gray, that \$50,000 would amount to about one-half of a cent on rates to your Electric Lighting Company individual customers? A. Yes; I estimate that that would be a reduction to residence customers.

CQ322. What is the total amount of the gross receipts of your company from such customers? A. I haven't that figure here.

CQ323. Can't you get that? That is what comes under the head of "Commercial Lighting." A. I believe that I can obtain figures if you wish me.

CQ324. Would that come under commercial lighting? A. No; it would come under residence lighting.

CQ325. That is a sub-division? A. Sub-division of lighting. I could obtain that figure if you desire.

CQ326. Right now? A. Yes.

290

#### Jesse E. Gary—Cross

CQ327. I wish you would. A. \$1,137,523.87.

Mr. Chairman Bliss: That is for 1923?

A. That is 1923.

CQ328. Mr. Dodge: And if you applied to your \$50,000 which you ask the Attleboro to pay in excess of what it now pays on that account it would increase the total by what percentage? A. Decrease.

CQ329. Decrease the total by what percentage?

A. By something less than 5 per cent.

CQ330. The total was— A. -\$1,137,000.

293

CQ331. It would be something less than 5 per cent.? A. Yes, sir.

CQ332. Now, your present rate that you charge householders is what? A. Fifty cents service charge plus 7c per kilowatt.

CQ333. And you could hardly reduce 7c by something less than 5 per cent., could you? A. We would reduce it to 6½. We would make the rate 50c service charge plus 6½c.

CQ334. That would be more than 5 per cent., would it not? A. Sure, because the current ratio is only a part of the total charge, so if we reduced the whole thing 5 per cent. it would be more than it is in part of it.

294

Mr. Chairman Bliss: Do your figures show what part of the \$1,137,000 is due to the service charge and what portion is due to the current charge?

A. The service charge is \$274,935.

CQ336. Mr. Dodge: How many customers have you? A. On that rate we rendered in 1923, 532,000 bills for the twelve months. I believe it is in the vicinity of 50,000.

CQ337. 50,000 customers? A. That is my recollection.

CQ338. Now, the rate which you charge them has been reduced at least twice while this contract with Attleboro has been in effect, has it not? A. What do you mean, since 68 was in effect?

CQ339. Yes. A. It was increased and then reduced.

CQ340. Let me ask you, to refresh your recollection if I can refresh your recollection by suggesting that your rate was 9c flat in 1917 when this contract was made? A. Then it went to the service charge of 50c plus the current charge which was in effect an increase of the rate, that is, we received more money from our residence customers after that time than prior to that time.

CQ341. Then you have since reduced it twice?

A. It has been raised, then reduced twice, that is my recollection.

CQ342. While this contract was in effect? A. It was producing after 1923 more per kilowatt hour than it produced when this contract was made.

CQ343. I don't question that; the fact is your rate has been reduced twice since this contract was made? A. After being increased.

CQ344. Can you call my attention to any suggestion in any of your annual reports that you had reduced the rate since 1917? A. I don't know whether it is in the annual report or not.

CQ345. Perhaps you don't want to stand by the statement in your annual report; I see that in your 1922 report it was stated, as a matter of reduction of rates that the rate of 9c was to be eliminated

296

and the rate of 7c plus a service charge to be substituted? A. What year was that?

CQ346. This was done August 1, 1922. A. I believe that refers to the stop class which was eliminated which states that no rate would need less than 9c per kilowatt hour.

CQ347. This is one of the reductions then you are speaking of? A. That is the elimination of the stop class, which can be considered as a reduction to a certain part of the customers.

CQ348. It was—that was estimated it would save the public \$140,000 during the first year; do you remember that? A. Yes.

CQ349. Then afterwards there was a further reduction; when was that made? A. I haven't the date of that.

CQ350. Well, it says here that there was a further decrease on September 1, 1922, from 7c to 6.9c? A. That is due to the coal clause and is not in effect a reduction.

CQ351. Then the 7c is still the rate? A. The 7c is still the rate.

CQ352. And that is a rate that is below the rate charged in Boston and many cities that are nearer to Providence, is it not? A. That is not the entire rate which—I am taking into account the 50c service charge also.

CQ353. Then it is 9.12c for 1923?

Mr. Chairman Bliss: That is the average you received from your lighting customers per kilowatt hour?

A. This is residence customers, 9.12c.

CQ354. Mr. Dodge: That is assuming—or shows a kilowatt consumption of how much? A. The

299

average for the year 23.4 kilowatt hours per customers.

CQ355. And you say that total would come to what? A. One million.

CQ356. No; the rate will come to what? A. 9.12c.

CQ357. And that is below the flat rate in Boston, is it not? A. My impression is that the Boston rate is now 9c; I am not sure of that.

CQ358. 9½c, I think. A. I can't state positively. CQ359. And New Bedford is 9½c? A. I haven't in mind the Bay States.

CQ360. And also Lynn, where there is an extremely successful company, 9½c? A. I can't answer that as I haven't the knowledge.

CQ361. At all events the rates which you are now charging, however much you would like to reduce them, are not unreasonably high, are they?

A. I should not say they are unreasonably high.

CQ362. What is your next largest group of customers? A. Probably the small, the medium sized stores.

CQ363. That would come under commercial lighting? A. But I haven't anything separated other than residence customers except by rates.

CQ364. What was your gross income? Let me ask you this for 1923. A. I haven't that figure.

CQ365. Can you get that here? A. It does not seem to be available. I think you will find that in the annual report.

Mr. Dodge: The annual report for the year 1923 which I would like to offer in evidence from which—there is no objection—I am reading contains an income statement.

302

## Jesse E. Gary-Cross

Mr. Chairman Bliss: That may be marked "Exhibit 7".

CQ366. Mr. Dodge: I have only a few more questions to ask, Mr. Chairman. The income account for the year 1923 shows a total revenue from all sources of \$6,636,601.17; total expenses, depreciation, interest and other deductions from income \$5,040,752.23; leaving a balance of \$1,595,848.94, disposed of by paying dividends \$1,302,456 on which there was a credit to service \$293,392.94. The dividend paid, Mr. Gray, I believe, is an 8 per cent. dividend? A. That is right.

305 CQ367. On the par value of the shares? A. Yes, sir.

CQ368. And the gross earnings of the company during the years since this contract has been effective with the Attleboro Company have gone ahead with great rapidity, have they not? A. The gross earnings since 68 went into effect?

CQ369. Yes. A. I believe the gross earnings have continually increased.

CQ370. In 1917 they were \$2,566,009; in 1923, \$6,600,000. Apparently there is no need to charge Attleboro any more to assure the stockholders there an 8 per cent. dividend, that you do not claim? A. If we maintain the same rates to our other customers.

306

CQ371. It is not your intention, of course, to do anything with any extra money you get from Attleboro that will endanger the 8 per cent. dividend? A. We would apply it to our other rates.

CQ372. When your surplus went up between 1922 and 1923 by over three times the amount of the additional money that you want to get from Attle-

boro, to what rate did you apply that additional sum, to the reduction of what rates? A. Our reductions of rates have been primarily on this lighting rate that we have previously mentioned, and I believe there was a reduction somewhat on certain power schedules.

CQ373. Have you reduced rates at all in 1923? A. In 1923, no; 1924, I think in January, there was a reduction that went in—either in the latter part of 1923 or early in 1924.

CQ374. And that, as anticipated, reduced the income of the company how much? A. I haven't is in mind.

CQ375. That is a small item, is it not? A. I don't remember the amount of that reduction. I can ascertain that if you desire it.

CQ376. I wish you would; now, are you aware of the fact that for the three months ending March 31, 1924—now, that reduction has been effective since the first of January, has it not? A. I don't remember the date; it was either the latter part of 1923 or the early part of 1924.

CQ377. Are you aware of the fact that with that reduction in effect the surplus of your company, after making provision for the dividends for the three months ending March 31, 1924, was \$248,000? A. Well, if you are reading from the surplus I assume that is correct. A surplus always accumulates in the first few months of the year.

CQ378. You generally hold for the year the surplus you make in the first three months? A. I should say that is customary. Of course, there are months which go the other way.

308

311

CQ379. You would expect that the remaining nine months should not show a loss. A. That will be impossible to tell for this year due to the threatened business depression. The mills in Rhode Island are—some on half time, some have been closed; and there is a general depression and our kilowatt hour for the past several weeks have shown a decrease over the same period of last year, so I would not be sure that this year that surplus will hold.

CQ380. You can not be certain in the ordinary year unless something striking takes place whether the profit in the first three months would be increased rather than diminished for the remaining nine months? A. We would expect to have as much at the end of the year.

CQ381. What I am coming at is this: that you do not need \$50,000 more from the Attleboro Company to make you a successful company with dividends reasonably assured on reasonable rates charged to your customers, do you? A. Not as long as we maintain our other rates.

CQ382. Which are reasonable? A. That would depend on the definition of reasonable.

CQ383. But you haven't had a complaint about them for years? A. I don't think but that is just and reasonable.

CQ384. I am asking you the question; you haven't had a complaint for a great many years, have you?

A. You mean a formal complaint?

CQ385. Yes, presented before this Commission under the statute. A. No, I believe there is no formal complaint.

CQ386. There never has— A. I don't recall of one.

CQ387. And you would be the last one, if asked yesterday or the day before, to admit that you were charging rates that were not reasonable to any class of customers, would you? A. I don't know what I would say yesterday.

Mr. Graustein: He might say he was charging discriminately.

Mr. Dodge: Discriminatory rates approved by this Commission under the statute.

Mr. Chairman Bliss: The time for the argument is later. The rates have to be reasonable from the public.

Mr. Dodge: Yes, Mr. Chairman; I am proceeding on the assumption that the burden is on the company.

Mr. Chairman Bliss: I assume the customer who is being charged should be charged what is considered a rate perfectly reasonable. There is the standpoint we have got to consider under the definition of the statute, which means a reasonable rate, which means the Company must get a reasonable return upon its property devoted to public use, and should maintain among its various classes of customers schedules that were equitable between the various classes of customers.

Mr. Dodge: That suggestion, Mr. Chairman, is a fundamental point here. We do not claim—it may shorten this hearing if I state right now that we do not claim that this contract price which we are paying in Attleboro is a contract price which at the present time yields of itself a fair return to the Narragansett

315

Company upon the basis of the part of its plant devoted to the Attleboro business. We do not agree that these figures here-we do not admit that the contract is actually causing an out of pocket loss, but we do say it has a return to them, a less than 8 per cent. return on that part of the property and I may add that we do not claim that it is proportional to the rates, all the rates that are being charged to other customers. It is a contract made under special circumstances with a rate which was not the uniform rate and which turns out to have been lower than they would have been willing to put into the contract now. What we claim is that, being contained in the contract, it can not be set aside by the Commission or the Courts unless it is not merely a losing venture for the Narragansett Company but causing them such a loss that they can not treat customers reasonably, or can not be assured of their return. That is the position we take, and in view of Judge Brown's language of his opinion and the language of the Supreme Court from which he quotes, and it is my contention, of course, that this company as it is now is amply able to take care of its customers in Rhode Island reasonably and at reasonable rates, to set up a large surplus after paying dividends without increasing the rate to Attleboro at all.

318

317

Mr. Chairman Bliss: The only reason why I referred to the matter was the term "reasonable" should be used in the same sense in which it is used in the statute, and any comment back

and forth as to rates being reasonable, why, a customer might think his rate is reasonable that might not be reasonable at all between various classes of customers. I recognize the contention, of course, that you make. It is a difficulty that has occurred to me in connection with the matter as to how far the company should be bound by the terms of its contract, if it is a matter whether they can come in here and say, "We want to avoid all the unpleasant features of this contract; we want to get our full return." It is then the duty of the company to bear its burden up to the point where they affect any equity to the general public.

320

Mr. Dodge: That is exactly the position we take—I think that is all.

## Redirect Examination by Mr. Graustein:

Q388. You have testified that this contract involved a current loss of \$45,000 or \$50,000; is there any reason to think that, if the contract was to run its full term on the rates fixed in 68, it will finally work itself out where it pays its full share of the cost to the company? A. It will not.

Q389. Is there any chance of that? A. In my opinion there is none.

Q390. Is there any chance of that paying a fair 329 return? A. There is none.

Mr. Dodge: What paying a fair return?

Mr. Graustein: Rate 68.

Q391. You don't think there is any chance that the length of the contract will bring about any advantages to the Narragansett Company? A. I am strongly of the opinion that it will bring greater disadvantages.

Q392. Than it now brings? A. Than it now brings.

Q393. In other words, your anticipation is that the loss to the Narragansett Company from the rate 68 will increase rather than diminish? A. I am.

Q394. In other words, it was \$45,000 in 1923, estimated \$50,000 in '24, and you anticipate it will be an increasing loss? A. I am morally certain there will be an increase in loss.

323

324

Q395. Mr. Gray, what is the chief difference between the cost of serving the Attleboro Company and the cost of serving an ordinary residential light customer? A. The loss?

Q396. The chief difference. A. The chief difference in cost is due to the distribution lines and the expenses due to the delivery of a small amount of electricity. They occur after the electricity leaves the substation; up to the substation the electricity is in bulk and the kilowatt to supply one customer is the same kilowatt to supply another customer, or any other customer.

Q397. Mr. Dodge was concerned with why your figures for cost to Attleboro differ from figures that would show the cost to the lighting customer, for instance, I think from your answer to one point—where the enormous difference would occur is under transformation and transmission data where the cost here is given for the actual transmission line and facilities running from the substation to the point of delivery to the Attleboro Company and the corresponding cost for delivery to lighting custom-

ers; is that true? A. Yes, for the same quantity of electricity we deliver to lighting customers which would supply a large territory and would require a large investment in distribution lines.

Q398. That investment would be charged and is, in fact, your rate making charge to that service, and not charged to this service? A. No part of this multiplicity of distribution lines is charged to the Attleboro service as computed in these figures.

Q399. One other question; will you tell me if this proposition is correct in regard to the question of the Attleboro Company's demand and the question whether a different return, a fair rate of 68, as Mr. Dodge has it \$44,000 a year or less and \$50,-000 a year is this, that there are two things go into making up a bill of electricity-one is the quantity of electricity and the other is the rate. The point Mr. Dodge was talking about depended not upon the rate at all but upon the amount of demand which was upon the company? A. Yes; there are those two primary factors that enter into all consideration of rates, one is what we ordinarily term the demand which controls the investment necessary to supply the customer, the other is the use of electricity which determines the so-called operating cost.

Q400. To make an illustration: one is the cost of flour a pound, and the other is the number of pounds of flour in the bag, and in this case the Attleboro Company was actually charged for less flour than there was in the bag—is that the situation? A. Yes; they were charged for a less demand than they were actually taking.

326

Q401. Mr. Chairman Bliss: Why didn't you charge them for the full demand? A. I think that was through inadvertence. We have been charging for 2,000 kilowatt demand and we negotiated for a satisfactory rate, a rate which would be satisfactory to both parties.

Q402. Did you have the right to charge for an increased demand under the terms of this contract?

A. We did.

Q403. Mr. Graustein: Under the terms of 68 there is no demand charge? A. No; the only one that took into consideration demand is schedule

101, which I presumed you were referring to.

Q404. So that the apparent difference between-Mr. Dodge apparently was questioning whether this rate 125 was a whole lot bigger than 101 ? A. It is not.

Q405. It is the same rate; the difference in figures is the difference in the charge for the full demand used? A. That is correct.

Q406. Mr. Dodge pointed out that in 1923 the demand increased from January to December very materially, and in 1924 in our estimate we didn't allow for a similar increase; is it true that increase took place practically entirely in December? Yes.

Q407. So if we had a difference in 1924 it would have made only a minor difference? A. Yes.

Q408. And affect the average for the year by only one-half; is that correct? A. That is correct.

Q409. Is it true that the supply of secondary electricity to any customer tends to reduce the cost of charge for primary electricity to all your customers by reducing the unit costs and the generat-

329

ing costs? A. It does if the nature of the load due to the secondary electricity is a desirable nature.

Q410. In other words, if they are going to make fluctuations in the load by increasing the number of kilowatt hours put out from your station you decrease your expenses on your rate and expenses of operation per kilowatt hour? A. Certain expenses are decreased.

Q411. The same number of watchmen may keep the generating station going whether it is generating electricity in the peak hours or not? A. Not.

Q412. So the more electricity is generated the less the electricity costs per kilowatt hour? A. That is correct.

Q413. And in that way some secondary electricity may be a benefit to the purchase of primary electricity? A. It is a benefit.

Q414. Mr. Chairman Bliss: At the time that you came before the Commission in 1917 for its approval of this special rate contained in that contract the Commission urged upon you the question whether by that rate and in that contract you had protected yourselves so that you could do business at a profit and not throw it back upon the other consumers of the company? A. Yes, sir; you asked us that.

Q415. That was stressed over and over again?

A. It was.

Q416. How did you come to make that blunder in your estimate? What is the reason it went wrong? A. Our estimates were based on plant values existing up to the time of negotiating this contract. Since then the World War has occurred and has been attended by an enormous increase in

332

335

the cost of equipment so that the unit cost of the plant today is valued at nearly twice what it was at the time of entering into this contract.

Q417. Did it cost twice what it did for the actual cost figures to your company, twice what they were before the war? Don't you mean replacement cost would be twice what it was before? A. They were twice what we estimated our costs would be in making this contract. This contract was at a flat price and the plant costs were those that were estimated to exist for the period of the contract.

Q418. Did you protect yourself in the contract upon the matter of fuel cost? A. Yes, sir; and taxes were the points that we were protected on; and we were not protected on investment cost.

Q419. So that this deficiency in return that you claim now is due to your failure to estimate the increased investment cost which would be necessary for facilities to produce the same amount of output that the pre-war prices did? A. Yes, sir.

Q420. How about the economies in the production of electricity? Did you take those into consideration at the time you made the contract? A. We estimated what we would expect to be able to generate electricity at during the period. The operating costs have been satisfactory in spite of the added labor cost, and coal cost. We have been able to hold our generating cost fairly uniform.

Q421. Then practically this whole deficit which you are seeking to make up now in order to secure the full 8 per cent. return is based upon your failure to appreciate changes that would be brought about in the costs of your generating machinery

.436

and transmission lines? A. Yes; that is the congideration that makes the contract a losing one.

Q422. Is that apparent from the figures in the exhibits you have presented here—Exhibits 1 and 2? A. No; I don't believe that would be apparent.

Q423. Have you any figures showing the gross amount that you have received from the Attleboro Company and the net receipts of your company covering the period of the contract from 1917, in tabulated form? A. No; I haven't those, Mr. Chairman, here. We were rendering bills under schedule 101 for quite an extended period and since that time adjustments have been made in accordance with the decree of the court.

338

Q424. Now, the only year you have complete figures for then is the year 1923 with estimates for 1924? A. Yes, sir.

Q425. You haven't figures for 1917 on to show how that particular rate and particular contract operated in reference to your company? A. No, sir; I have some other figures prepared from the outside sources. They show a loss—not prepared by our company.

Q436. Now, taking your Exhibit 2, you have set out in paragraph form but not in tabulated form the results for the year 1923? A. Yes, sir.

Q437. And you show that the gross receipts were \$109,981.80? A. Yes, sir.

339

Q438. Which appears on page 3, Exhibit 2; now, you state that there are certain costs you have to pay with reference to substation and transmission lines which forces you to pay out of that gross amount \$6,441.25—appearing on page 4 at the top—

Mr. Graustein: Those are figures for 1924, estimated.

A. That is for 1924.

Q439. Mr. Chairman Bliss: Have you the corresponding figures for 1923? A. Yes; that is on the first page.

Q440. The total amount received in 1923, the gross receipts were \$103,582.60? A. Yes, sir.

Q441. Now, from that you deduct the same amount that you do in 1924, \$6,441.25? A. Yes, sir.

Q442. Leaving \$97,141.35? A. Yes, sir.

341 Q443. You then take out the estimated cost of that of \$76,640.90? A. Yes, sir.

Q444. Leaving net receipts of \$20,500.45? A. Yes, sir.

Q445. Now, you take out depreciation, insurance and taxes, amounting to \$16,785.09? A. Yes, sir.

Q446. Leaving a balance of \$3,715.36; then you take out the depreciation on your cables, transmission lines and so forth, the amount of that for 1923, \$24,826.48——

Mr. Graustein: That includes all the depreciation.

Q447. Mr. Chairman Bliss: The first item is maintenance, depreciation and taxes, \$4,478.74, is it not? A. Yes, sir.

Q448. Now, you have rated a deficit of \$763.38, and again you take out an item \$3,562.65—that still leaves a balance of \$152.71 to which is to be added your final item of maintenance, depreciation and taxes on transmission and line of \$4,478.74,

and that leaves you short \$4,631.45 after paying your expenses prior to any return on the investment? A. \$4,326.03.

Q449. And a similar figure for 1924 shows a shortage of \$6,781.95? A. Yes, sir.

Q450. You haven't anything to show the operation of—the actual effect there upon your revenues of serving this company for the years between 1917 and 1923? A. No; they would be a loss in all cases,

Q451. Was the loss more severe than this is?

A. I couldn't state without going into some form of calculations.

Q452. Have you made any detailed statement here of your probable losses up to the end of the period of this contract? A. No, sir.

Q453. The contract is for twenty years, expiring in 1937; do you think the losses would increase year by year to the termination of the contract? A. In total amount, yes.

Q454. That is, you mean the deficit would be greater? A. Greater than \$50,000.

Q455. In each year? A. Yes.

Q456. For the remaining portion of the contract?

A. Yes.

Q457. Now, the year 1917, what date did you make this contract? I have it here; it is dated on the 8th day of May. You were familiar with the conditions brought about by the World War, were you not? A. No, sir; the prices hadn't taken the upward tendency at that time and this contract, the negotiations and the figuring were made in the previous—

Q458. Hadn't prices of copper and metal gone up tremendously in May, 1917? A. Not tremend-

344

ously—there was a lag behind but at the end, on our going into the war they had taken an upward tendency but they had reached nothing like the heights they have reached since then. At that time it was anticipated the war would be of short duration.

Q459. Did you take into account at all, in making that contract, the matter of increased cost of generating units and transmission lines? A. Not at all; they were based entirely on data obtained prior to that time.

Q460. What are the percentages of the increases, if you know, in the cost of the generating machinery and plants? A. I haven't those figures available.

Q461. You couldn't tell us? A. At the time of entering into this contract we assumed plant costs of \$45 to \$50 per kilowatt; the costs as shown by us for 1924, for the entire year, average \$89.15 which is practically 100 per cent. increase.

Q462. Have you other contracts there that have worked out against your expectations like this one? A. I know of none.

Q463. Have your other contracts borne the full portion of the burden to pay operation expenses, depreciation, taxes, and a return on the capital? A. We know of no contracts that are not.

Q464. You must have some rates that are returning more than they should? A. We have.

Q465. You haven't determined which those are?

A. No.

Q466. Why didn't you consider the probable effect of this World War? We had already entered into the war at the time you made this contract, had we not? A. It is impossible to estimate the

347

duration of the war and the amount of machinery which it would be necessary for us to install at the high prices. If the war were for a short duration we might be able to ride over without increasing our investment to any material extent.

Q467. Well, it wasn't an ideal time to enter into an obligation covering a period of twenty years with all the uncertainties involved, was it? A. It has not appeared so by subsequent events, but many contracts were entered into at that time of this same nature.

Q468. How long a period did you take in negotiating this contract, how long was the matter under consideration between you and the Attleboro Company? A. I should say in the vicinity of a year and a half, that is just a rough guess.

CQ469. Mr. Dodge: Your company solicited the contract, did it not? A. Yes, sir.

CQ470. And made up an elaborate report showing how it would be to the advantage of that company to take its current from your company? A. That is what we did.

CQ471. You knew that the Attleboro Company thereafter dismantled and removed their own generating plant in reliance on this contract? A. We knew that, yes, fortunately.

CQ472. Now, the prices of metals, copper and other metals had gone up tremendously by 1917, had they not? A. I should not say so; my recollection is they hadn't gone up tremendously at that time.

Q473. Mr. Graustein: Mr. Dodge spoke of the surplus earned by the Narragansett Company over and above its dividends in 1923 and three months of 1924; that showing is based on the—including

350

the revenue from the Attleboro, not at the rate of 68 but at the increased rate of Attleboro paying its full share; is that correct? A. In 1923 it is; I am not sure of 1924.

Q474. Could you find out about '24? A. Yes; 1924 includes charges under schedule 101.

CQ475. Mr. Dodge: You mean you are publishing to your stockholders as the condition of your company sums which the Federal Court here has determined you are not entitled to; is that correct?—and parts of it you have refunded the Attleboro Company. A. Those have gone on the books as that.

353

CQ476. Do I understand that you have handed out reports showing as the income of your company the rates which you were trying to collect under 101? A. Yes; we put on our rates—on our books the amount we billed the Attleboro Company. It seems to me that is good accounting practice.

CQ477. Which proved to be rather illusory accounting practice? A. It seems to me to be correct.

CQ478. However that may be it increased your service by whatever the amount was you paid back to the Attleboro Company so far as the last six months of 1923 are concerned, affecting your returns on the average less than \$2000 a month during the entire 23 months; that is so, is it not? A. That is the amount that we repaid.

351

CQ479. You repaid about \$12,000 for the last six months of 1923, of your excess charge for the entire 27 months, so stated in the affidavit of your company to be about \$40,000, was it not—Mr. Graustein?

Mr. Graustein: You said it was forty-seven a while ago. A. No; it was either \$37,000 or about \$41,000, I remember that.

CQ480. Mr. Dodge: But considerably less than \$2000 a month; it was \$12,000 for the last six months of 1923, so that that didn't affect your surplus of \$265,000 so as to endanger it at all, during 1923? A. (No answer.)

Mr. Graustein: We are through.

Mr. Chairman Bliss: Have you completed your testimony?

Mr. Graustein: Yes.

Mr. Chairman Bliss: It seems to me we ought to have a definite statement of the operation of your contract over that period of 1917 to 1922, inclusive.

Mr. Graustein: I would like to introduce such a statement to the Commission as soon as it can be prepared and give Mr. Dodge an opportunity to submit comments on it.

Mr. Chairman Bliss: I think we should also have as definitely as you can make it your reasons for and your estimate of the probable operation of this contract during the period of 1924; you have given it for 1924—we would like to know the whole effect of this thing.

Mr. Graustein: We can draw a paper showing the increase of the Attleboro Company in the past and project that into the future, and prepare figures that will show the result of the development, and we will be glad to prepare any other data which, either now or later, the Commission would like to have submitted.

356

### Jesse E. Gray-Recross

Mr. Chairman Bliss: I think we also should have a statement covering the period from 1917 on showing the total electricity generated and the total amount for each year that was supplied to the Attleboro Company.

Mr. Graustein: We will supply a complete statement showing the operation of the contract from the beginning to the end, showing the actual figures as far as we have gone and estimates for the future and submit that in a tabulated form so it will show at a glance the trend.

359

Mr. Chairman Bliss: There is another matter that I should like to have made a little clearer. What I want to get at is the question whether the Narragansett Company acted with due prudence and foresight in entering into this contract at the time that they did, having particular reference to the cost of the generating machinery and other items that go into the carrying on the work of generating and distributing electricity. I think we ought to have something which would show the cost of the various substantial things, the generators and transformers, things of that kind, as of the time that the company entered into the con-If those increased costs have come about outside the range of ordinary judgment and foresight, why, it ought to be made clear in this matter. We can not take judicial notice of the fact that prices have gone up and prices have come to stay, unless we have something in the way of testimony before the Commission.

Mr. Graustein: We will assemble data of that kind and submit that data either at an adjourned hearing or in the form of an exhibit, if it is agreed and found practical to submit it in the form of an exhibit.

Mr. Chairman Bliss: I would suggest you prepare those in the form of an exhibit, supply counsel on the other side with a copy of it and then if it is desired to have witnesses come in here for cross examination the Commission will set a time at which that may be done. Those are the particular things that suggest themselves to me as matters that ought to come into this investigation.

362

NOON RECESS

366

#### AFTERNOON SESSION:

Mr. Chairman Bliss: The hearing will be in order.

#### FRANCIS J. STANWOOD

Francis J. Stanwood is called on behalf of the Attleboro Steam & Electric Company and, having been duly sworn, testifies as follows:

# 365 Direct Examination by Mr. Dodge:

Q1. You are a public accountant, Mr. Stanwood? A. Yes, sir.

Q2. And have been for how long? A. Over ten years.

Q3. During that period what part of your time has been devoted to public utility accounting? A. The entire time on that phase of work.

Q4. And a considerable proportion electric power company accounting? A. Yes, sir.

Q5. What proportion of your time has been spent on that? A. Eighty per cent.

Q6. Have you, for several months past, been engaged in examining the books of the Narragansett Electric Lighting Company, and in making reports on various matters to the Attleboro Company? A. I have.

Q7. And have you been given full access to the books of the Narragansett Company? A. I have. Q8. And have made tabulations from those books? A. I have.

- Q9. Have you your reports here of which I have copies before me? A. Yes, sir.
- Q10. I want to ask you just a few questions with regard to them. I want to ask you, in the first place, to give the surplus earnings of the Narragansett Company, as taken from their books, for each year beginning with 1919, after the payment of dividends, which seems to be schedule 2. A. As inspected we find these figures for 1919, \$41,429.81; 1920, \$25,404.42; 1921, \$37,592.70; 1922, \$85,224.72.
- Q11. Now, if you will turn to your supplemental report and give me the figures for 1923 and for the first three months of 1924? A. For the year ending 1923, \$293,392.91; and for the three months ending March 31, 1924, \$248,969.02.

- Q12. Those were the last figures that were available to you?  $\Lambda$ . Yes, sir.
- Q13. Did you also determine for us the surplus after reserve for dividends for the same three months of 1923? A. The surplus for the three months ending March 31, 1923?
  - Q14. Yes. A. \$248,672.57.
- Q15. Exhibit 1 is a document that was furnished to us some ten days ago; I think you saw it, did you not? A. Yes, sir.
- Q16. And you are familiar with the table called Generating plant data? A. Yes, sir.
- Q17. And with the fact that for 1923 3600 was 3 taken at our demand? A. Yes, sir.
  - Q18. And for 1924, 3840? A. Yes, sir.
- Q19. Do you know what, in apportioning these average unit costs, is taken by the Narragansett Company as the demand of the Atlantic Power Company? A. The last inspection we found the por-

tion assigned the Atlantic Power Company to be a fraction—15,500—over 55,000 apportioned.

Q20. It was 15,500 as the figure corresponding to the 36 or the 3840 for the Attleboro Company? A. Yes, sir.

Q21. And the Atlantic Power Company is the company that supplies the New England Power? A. I believe so.

Q22. In apportioning the generating plant capital costs between the different companies in proportion to the maximum demand in kilowatts, what do you say as to the propriety of dismissing from consideration entirely the secondary current and the profit derived therefrom? A. I don't think I quite understand your question.

Q23. Do you think it should be disregarded in apportioning the capital costs of the generating plant? A. No; I do not think it should be disregarded, it should not be disregarded.

Q24. Why is that? A. For the reason that a plant of this description having ability to sell a by-product, namely, the secondary power, should give the benefit of any profits, admitted profits by the sale thereof, towards the reduction of the capital asset, its capital asset as a valued plant. The Narragansett Company appeared to be, to have the ability to sell large blocks of secondary power which might be sold at a profit. These profits are devoted towards setting up other reserves than those which apply to the generating plant and not applied to further reserve on depreciation to retire the plant which created the sale.

Q25. Is there any other profitable business conducted from this generating plant which is taken

371

into consideration in apportioning the costs among different users where that cost is divided solely on the basis of demand for primary power? A. I don't think I quite get your question.

Q26. I say, is there any other profitable business which, like the business in secondary current, is produced by this generating plant and not taken into consideration for the apportioning the capital cost of that plant solely in accordance with primary current demand? Are there any other residuals of any kind that are sold? A. None to my knowledge.

Q27. So that the secondary current is the only other item that you think of which should be included in an apportionment of costs or taken into account in some way so far as the generating plant is concerned? A. Yes, sir.

Q28. Now, with regard to the overheads which are listed in the last sheet of Exhibit 1, beginning with the item for salaries of general officers, directors' fees, and so on, have you any criticism to make of the way in which those items are apportioned in schedule 1? A. I believe there should be a credit given for the application of part of this overhead to the operation of the gas business which produces a gross income of some 120 odd thousand dollars per year, and also to that department of the Narragansett Company's business that has to do with the promotion of sales of appliances which is quite an undertaking and warrant some supervision from this department.

Q29. What do you say as to the propriety or impropriety of apportioning these items in strict accordance with the total current sold where the

374

Attleboro Company is a single wholesale customer? A. I should think it would be unfair on the kilowatt basis, for the reason that any wholesale purchaser should be charged with only that part of administration expenses as is warranted in putting the goods upon the shelf, so to speak. Attleboro buys goods from the stock room and these general expenses are those which result in running a business having upwards of 70,000 customers, and the Attleboro Company being one wholesale of the 70,000.

377

Q30. Do you understand that electricity sold in that tabulation means the electricity as it leaves the generating plant or as it is metered in Attleboro? A. I mean purchasers at any point, measurement either at South Street or East Providence, or Attleboro.

Q31. What is that in this particular column, electricity sold in K. W. H.? A. This appears to be—I am not familiar, but this appears to be the unit expense, unit cost per K. W. H. basis upon kilowatt hours sold which would be a lesser number than would be the case for kilowatt hours measured at the steam plant or the point of generating and delivery where that measurement is taken by deducting, to make this computation basis upon electricity sold would tend to increase the unit cost and would seem to operate unfairly in the Attleboro case.

378

Q32. Because the Attleboro Company under this proposed rate is to take the burden of leakage? A. Yes; it would appear that they are, and that the distribution losses are absorbed by dividing on electricity sold, which would appear to be the full

reading of all meters in the company's territory.

Q33. The ordinary consumer pays only for the electricity that his own meter shows? A. Yes.

Q34. Have you seen any of the readings of the company for any particular month as to the total electricity made and the total demand by the Atlantic Power Company? A. I made a note of the takings for the year 1922.

Q35. You told me of the month of September 1923. A. I remember offhand the month of September 1923 would be, the total generated 34,000,000 taken by the New England Power; 23,000,000 was taken by the Atlantic Power—23,000,000.

Q36. You haven't got it for the entire year for 1923? A. No. sir.

Q37. Now, have you some information bearing upon the propriety of taking 64,000 or thereabouts as the total peak load denominator of the fraction which is used in assessing upon the Attleboro Company its ratable share of these capital costs? A. I don't think I quite get your question.

Q38. Have you taken readings from the records of the company of the maximum of electricity generated at particular times—peak load, I think they call it? A. We made a study of the station logs at the Melrose station and found, repeatedly we found 85,000 to 90,000 kilowatt hours on the plant. The peak load periods were from eleven o'clock in the morning and 4.30 to 5 o'clock in the afternoon, and 8.30 to 9 at night. We found that the plant would carry and did, considerably in excess of 64,000 k. w. capacity.

Q39. That means as to whether it was fair to take 64,000 as the denominator of that fraction?

A. I should consider it as unfair, and there should

380

be a higher demand—it would appear that a higher demand should attach to the so-called plant demand of the Narragansett Company.

Q40. Have you yourself, from the books, undertaken to figure whether or not in the year 1923 this old contract with Attleboro resulted in a loss or a gain? A. I have.

Q41. And what conclusion did you arrive at? A. We considered that for the year 1923, and we studied the condition at the end of six months thereof and reviewed again the situation after the close of the business, that there should have been a profit of \$5000 to the Narragansett Company, approximately \$5000.

383

Q42. Does that take into consideration the 8 per cent. return? A. Yes, sir.

Q43. As well as the actual cost? A. It does.

Q44. Apportioned as you think it should be apportioned? A. Yes, sir.

Q45. You were aware of the fact that in 1921, the latter part, throughout 1922 and 1923, electricity was billed to the Attleboro Company under rate No. 101 although it was paid by the Attleboro Company at that rate only during the time when the preliminary order of the court was in effect, namely, the last six months, did you know those facts, or didn't you have occasion to go into that? A. Yes; I think I am prepared to answer.

384

Q46. Can you tell us what the total, the extra billing, under the 101 rate was for the 47 months as compared with what it would have been under the contract? I am not sure whether you have a table showing that or not? A. I doubt if we have that.

386

Q47. I have here a figure stated in this affidavit filed in court at the time of the hearing on the preliminary injunction, perhaps we can use this figure. It is agreed that I may read this from the affidavit of the Narragansett Company filed in court. Such calculations as the Narragansett Company has made give a figure of \$165,986.19 as the charge which would have been made under the original rate for the same services which under schedule R. I. P. U. C. No. 101 was billed for \$205,606.71. That is a difference of a trifle under \$40,000.

Mr. Chairman Bliss: Covering what period?
Mr. Dodge: That covers, I believe, the first
27 months, from April 1, 1921, to July 1, 1923,
I think—yes; these bills were for electricity delivered from April 1, 1921, to June 30, 1922,
it says here—I think it should be '23—

Mr. Graustein: Yes.

Mr. Dodge: -both inclusive.

Cross Examination by Mr. Graustein:

CQ48. Mr. Stanwood, you figured the cost to the Narragansett Company in 1923 under charge 68, and you came to the conclusion, if I understand your testimony, that the charge under 68 would have equalled the cost, provided a margin of about \$5,000? A. Yes.

387

CQ49. Now, in that calculation did you use the same data that Mr. Gray used in Exhibit 1 and got a different arithmetical answer? A. No, sir: we used a lesser plant investment, a lesser perfect plant investment for the Attleboro's service charge.

CQ50. A lesser plant investment than what other figures? A. I think that is all, just in the plant investment.

CQ51. Now, you used a certain demand, what demand did you assume, was it 2000? A. 2,000, I think, was the demand we used.

CQ53. Now if, in fact, the demand of the Attleboro Company was 3600 your figures would be wrong, would they not? A. Yes, sir.

CQ54. If the demand, in fact, was 3600 kilowatts and not 2000 your figures would be wrong, would they not? A. Yes, sir.

CQ55. By a very big margin; your cost figure is based on a certain demand, is it not? A. The cost figure is.

CQ56. Because upon the basis of that demand you pro-rated the plant charges? A. Yes, sir; in assignment.

CQ57. And you assumed a demand of 2000? A. As I remember 2000 was the figure.

CQ58. If 3600 was the correct figure your results, of course, would be away different? A. Precisely.

CQ59. Have you any reason to think 3600 is not the correct figure? A. No; I believe that probably some other figure is true.

CQ60. Probably 2000 is wrong? A. Yes, I admit that I think 2000 is wrong. In the course of making the investigation we inquired of Mr. Gray of these various demands and we were given to understand that no instruments were installed at that time but some were ordered to place the demand on these various circuits.

CQ61. You have no reason to question the accuracy of the 3600 which has been testified to this morning? A. None whatever.

389

CQ62. I just want to ask you to confirm one or two facts; your study indicated that the generating plant of this Narragansett Company are very low, that is, the standard, their record stands among the best in the country—is that correct? A. Yes; that is a fact.

CQ63. In the figuring of the cost to the Narragansett Company of this surplus you not only assumed a certain demand on the part of Attleboro and a certain peak load on the Narragansett—what peak load did you assume? Did you take Mr. Gray's figures or did you add something to them? A. I think we corrected them for the peak load.

CQ64. In other words, something called secondary power you didn't include in peak, you took the primary power? A. Yes.

CQ65. I judge in doing that, in doing that, you were not sure the fact was right; did you feel sure you were right? A. No, as a matter of guessing, my inspection of their records as to their peak load and study of their log, not setting up one for myself.

CQ66. Of course, you would not feel that the company was justified in selling primary power to the absolute capacity of its plant without a provision for breakdown? A. Not at all.

CQ67. So that the actual output is not necessarily an indication of the peak load? A. Not at all.

CQ68. The peak primary load is the load the company is obliged to deliver in all contingencies? A. Not at all, we had that in mind.

CQ69. You had—you included, as primary power, power which the company was not under obligation to deliver under all circumstances? A. Certainly, yes.

392

395

396

### Redirect Examination by Mr. Dodge:

Q70. And in view of the readings of the log which you have taken and which you have testified to have been \$85,000 to \$90,000, have you an opinion as to what should be taken as the peak load of the company for the purposes of that fraction that we have been speaking about? A. It all depends upon what the condition is now. If instruments are placed upon the various circuits and the experience of the company is that they can repeatedly carry, day in and day out, and month in and month out, 80,000. there should be some middle ground and some remuneration to those that pay the plant a return to provide for the profits accruing from sales, there should be some provision so that the profits accruing from those sales can be applied to reducing the plant investment by increasing the depreciation reserve; in other words, those who buy, take primary current and pay the 11 per cent. return on the plant and every dollar of the plant is in there, are not getting the same benefit by the by-product sale of this plant.

Q71. That is practically a slightly different point from the one I was trying to direct your attention to. I understand you to say that you thought 64,000 was too low a figure to take as the peak primary load of the company; didn't you say that? A. Yes; I believe that is so in this instance.

Q72. What figure do you think should be taken there? A. Nearer 75,000, between 75,000 and 80,000.

Mr. Dodge: That is all.

CQ73. Mr. Graustein: In regard to that question just answered, you added something to the 64,000 just on general principles, so to speak? A. Yes.

CQ74. Do you know that the company had two units out of commission a year or so ago? A. They had various sized units; they had a large one which has a 45,000 normal rating.

CQ75. They had that out? A. They had that out. CQ76. When that was out the production was reduced? A. About 80,000.

CQ77. And that reduction would come first out of the secondary power; it did come first out of the secondary power? A. Yes.

CQ78. Is not that differentiating from primary work somewhat different to the Attleboro as to the month and a half? A. As I remember it the large unit was down when we saw the log and there was over 70,000 on the clock. I believe that is correct. I am speaking from memory now. I believe it is 70,000 on the log at 11 o'clock on one of the mornings when the 45,000 turbine was out.

CQ79. That would not justify, however well, them guessing of 75,000 or 80,000 primary load, would it? A. I don't see but what it would; I don't see any difference. It is just a matter of opinion. I don't know of any other condition to go by.

CQ80. Would you consider it good service for the company to sell primary power and then be unable to deliver it? A. No, sir; not a minute.

CQ81. Then you do not think the Narragansett wrought up this primary load from 64,000 to some higher figure, they would be doing it at some expense and giving it a conservative service? A. I don't think I can answer.

398

CQ82. Of course, the company wants load capacity and taking risks of breakdown, and putting in—putting a bigger load on? A. On account of so many secondary contracts and the plant seemed to have the experience, we went upon the experience of the plant in creating an impression that it could, as a matter of capability do a thing, and we found it governed in the history of the Attleboro contract for never have they been cut off except when the plant was down entirely,—when the Narragansett plant was down entirely, and we found by experience that they could carry a substantial part of the secondary load and we guided our results by what we found to be their experience.

401

CQ83. Is this true, that the only fair thing to consider on the part of electricity is the electricity which the company agrees to deliver and which it reasonably expects to deliver? A. That is.

CQ84. You did not get 64,000 which the company was not under obligation to deliver? A. That is correct in this instance, we took that, yes.

CQ85. If Mr. Gray told you that they had been only able to deliver 65,000 kilowatts when these two units were out would you feel that your recollection should be set against his statement? A. Well, I should not want to dispute it, certainly.

402

Mr. Graustein: That is all.

Q86. Mr. Dodge: Did you figure the comparative sums that would be paid by the Attleboro Company under the original rate No. 68 and under the proposed rate No. 125, in 1923 and 1924, took into consideration the actual demand? A. You will have to help me.

Q87. On your supplementary report which I have here—turn to the next to the last page; you see that page headed "Comparative costs Attleboro Steam & Electric Company" under the original contract No. 68 and proposed contract No. 125? A. Yes.

Q88. Now, so far as the year 1923 is concerned, are those two figures based upon the actual demand of the Attleboro Company or upon the assumed 2,000? A. 2,000 for '22 and 3,840 for '23.

Q89. 3,840 or 3,600? A. 3,840.

Q90. You took 1923 as 240 higher relation? A. Yes—I don't understand you—I took it or we worked it on the supplementary on the 3,840.

Q91. And the same for 1924? A. And the same for 1924.

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404

Q92. You figured that the 1924 proposed new rate would cost the Attleboro Company and yield to the Narragansett Company how much in excess of contract No. 68? A. About \$37,000.

Q93. And how much in 1923? A. \$11,000.

Q94. Why is there that great discrepancy? A. I do not appear to be able to answer that right here.

Q95. You assumed some 10,000,000 kilowatt hours in 1923 and estimated 12,000,000 in 1924? A. Well, that as I remember we used the same demand, 3,840 for both '23 and '24; there appeared to be a big difference.

Q96. Did you use the same coal cost under the old contract? A. Yes; the same coal cost is used for '23 and '24, coal based at \$6.50.

408

### THOMAS C. FALES

THOMAS C. FALES is called in behalf of the Attleboro Steam & Electric Company and, having been duly sworn, testifies as follows:

# Direct Examination by Mr. Dodge:

Q1. Mr. Fales, what office do you hold in the Attleboro Steam & Electric Company? A. President. Q2. And have been president for some years? A.

yes, sir.

Q3. Were you a party to the negotiations of this contract of 1917? A. Yes, sir.

Mr. Dodge: Do you (Mr. Gray) agree that the contract was solicited by the Narragansett Company?

Mr. Gray: Yes, sir.

Q4. Mr. Dodge: Where was the contract actually made and signed by the parties? A. My recollection is that it was signed in Boston.

Q5. Did you have any conversation with the representatives of the company, the Narragansett Company, and, if so, with whom, as to whether or not it was expected by them at that time that this contract would yield any profit during the first half of the twenty-year term? A. We had that conversation with Mr. Gray and Mr. Lisle. They generally agreed that the contract would not be fully profitable during the first ten years.

Q6. Did Mr. Gray and Mr. Lisle say so? A. Yes, sir.

Q7. They expected to make a profit in the last part? A. To make up for the loss in the first part.

Q8. Why was it anticipated, if nothing was said on the subject, that the contract should be more profitable in the last half than the first half? A. A contract running over twenty years—it was felt it was rather a long time to wait for the real favorable price of our own, but the talk was commonly—you wanted your cakes and ales during the first part of the contract, and then it was arranged that the price was made accordingly, and that they fully expected to make up in the last ten years of the contract any loss they might make in the first.

Q9. Owing to the increased demand? A. Yes, sir.

Q10. I think it was anticipated that the demand would raise as high as 20,000,000? A. That was all forecast in the report made by the Narragansett Company; I can not give you the exact figures but I think that is approximate.

Q11. Did you in 1921 when that proposed new rate was under discussion have any conversation with Mr. Gray with reference to whether or not your contract up to that time had yielded no margin above the actual cost? A. It was stated to us that possibly there was a profit of 2 or 3 per cent. on the investment, not a full 8 per cent. return.

Q12. Was it claimed to you at that time that the contract hadn't yielded enough to pay the cost? A. No, sir; it was stated that there was a small return on the capital invested.

Q13. But less than 8 per cent.? A. But less than 8 per cent.

Q14. Now, from the time in 1921 when the Narragansett Company undertook to put into effect 410

rate 101 you were billed at a higher price? A. From April, 1921, we were billed at a higher price; yes, sir.

Q15. And you continued down to July 1, 1922, to pay at the old rate, but to set aside in the bank the difference between the two? A. We paid nothing up to July 1st.

Q16. Well, there was a controversy over the validity of the new rate that was pending? A. We set up a reserve.

Q17. You set aside in the bank the total amount billed to you under the rate 101? A. Yes, sir.

Q18. Then, after the suit was brought, from July 1, 1923, an order was made by the Court that you should pay at the new rate and should get a refund if the new rate should turn out to be invalid? A. That is true.

Q19. I think we did pay the new rate then for six months? A. Yes, sir.

Q20. And then got a refund bringing your payments down to the contract No. 68 rate? A. That is true.

Q21. I want to ask you what the amount of the difference between the two rates was for those six months, that is, the amount of the refund that came to you under the final decree of the Court? A. My impression is that it was between (about) \$12,000 including interest, I am not sure about that.

Q22. \$12,000 including interest, a comparatively short period? A. Yes.

Q23. You are connected with other electric companies besides this? A. No other electric companies; two gas companies.

Cross Examination by Mr. Graustein:

CQ24. You agree, I take it, that the installation of plant capacity today is much more capacity (costly) than it was in 1917? A. Yes.

CQ25. In view of that do you think that the Narragansett Company could realize its expectation of making a profit on this contract? A. I think it is quite possible to make a forecast now. As it was at that time there is no reason to believe that if Mr. Gray could not make it seven years ahead, or seven years ago, it is doubtful whether he can make one seven years from now.

CQ26. The profit which Mr. Gray expected to see in the next ten years was due to the increase in demand? A. That is what I understood.

CQ27. If that increase in demand—of course, that would require an additional plant capacity, if that plant capacity continued to cost anything like the present rates, instead of the contract improving as years went on it would result in the second ten years being worse than the first? A. If the plant cost continued to increase; yes, sir.

CQ28. Or if they stood at ordinary—A. If the plant costs decreased, why, then, of course, there might be a profit to the Narragansett.

CQ29. With the plant costs at the present level the Narragansett faces an increase in loss rather than a decrease in loss? A. Yes.

CQ30. Your charges in Attleboro are based—they are not on schedule 68 but on the cost of power to you fixed at cost to Narragansett on 101 or 125? A. Until this case is settled we have to set up our books on 101.

CQ31. You make your charges on that basis and you are paying the excess in the bank? A. Yes, sir.

416

419

420

# Redirect Examination by Mr. Dodge:

Q32. With reference to the date of the contract, perhaps you can tell us whether the connection between the Narragansett Company and the New England Power Company antedated the contract, or came entirely after that? A. My impression is, I think not fully; a larger part of the New England came after our contract. Possibly they may have had some connection before.

Q33. Mr. Chairman Bliss: In this new rate which is now under investigation the charges to you are based upon the \$19 unit cost? A. Yes, sir.

Q34. And a rate of 8 mills? A. As I recollect it. Q35. What is it under the existing contract? Is it possible to make a comparison between those figures? A. There was no demand on the old contract; it was simply 8 mills—57/100 mill increased or decreased by the price of coal, the only variation was price of coal and taxes.

Q36. The difference in the new rate is charging you at the rate of \$19 for a demand of 3,840, as they estimated? A. Yes; there are substantial other differences too. The difference—under the old rate electricity was delivered at our switchboard; we stood no line losses at all. We were paid a return on the cost of the line; we were paid additional charges for station labor which we would not have to incur if it was not for this contract. Now current is being delivered to us at an entirely different point from the old contract called for.

Q37. What percentage of current loss do you estimate there is by reason of the measurement of

this electricity at the East Providence substation?

A. Ten to 12 per cent.

Q38. Is that the estimate of the Narragansett Company? A. I think that is the difference shown by the readings between the East Providence and the Attleboro stations.

Q39. Are there any other differences besides those you have mentioned? A. Those are the essential features.

Q40. Then, if I understand you correctly, under the present contract electricity is measured at a station near Attleboro? A. In Attleboro on our side transformers; we accept no loss under the present contract.

122

Mr. Dodge: I should like to see, as having some bearing on the rate which you charge against us, the contract between the Narragansett Company and the Atlantic Power Company.

Mr. Graustein: It is on file with the Commission.

Mr. Chairman Bliss: Copies are on file with the Commission.

Mr. Dodge: Perhaps it will be agreed that 15,500 is the primary demand figured in that contract.

Mr. Graustein: Mr. Gray says 15,500 is it.

Mr. Dodge: That concludes our evidence unless we have to file something in writing with reference to Exhibit 2, which we didn't see until this morning, or unless some of the further figures which they have to file suggests something.

Mr. Graustein: I want to put in, by Mr. Gray, one thing on the question of the amount of the peak load when the two units were out.

JESSE E. GRAY is recalled by Mr. Graustein:

Q481. You heard the testimony in regard to the time two of the units were out about a year or so ago? A. Yes, sir.

Q482. What was the peak load of the company's plant at that period? A. We were able to carry during the daytime, with our 45,000 and the 20,000 down, and operating part of the 45,000 as a synchronous condenser, 55,000 to 57,000, that was day after day.

Q483. That was stretching yourselves? A. That was doing all we could to show that we were running the 45,000 as a synchronous condenser.

Q484. Are you able to tell now the primary demand of the Atlantic Power Company? A. Approximately 19,800.

Q485. 19,800 kilowatts is their primary demand today? A. Approximately.

CQ486. Mr. Dodge: How long were the two units out of commission? A. Quite an extended period, several weeks.

CQ487. That was due to what? A. That was due to field trouble; part of the machines had to be sent back to the factory to be repaired.

CQ488. That is the only time in the history of your company that two units broke down at the same time? A. No, sir.

CQ489. When was the last time? A. I can not give you the dates without looking over the record.

CQ490. When was this particular time? A. This was last summer, the summer of 1923.

CQ491. When in the summer? A. I can't give you the date.

125

CQ492. Have you a reference to them here? A. No; I haven't the dates here.

CQ493. Was there not a time that Mr. Stanwood was there when one of the units was temporarily out of commission? A. Yes, there was a time that there was one out, but the time there was two out, I am talking about the time when two were out, the 45 and the 20.

CQ494. I suppose something might happen to incapacitate you to a greater extent than that? A. Why, sure.

CQ495. But you obviously have to contract, do contract in the exercise of reasonable business judgment, for the amount you can deliver if an extraordinary accident should incapacitate temporarily a large part of your plant? A. Yes; but we don't contract for more than we can deliver under the ordinary operative conditions which assume at least the largest turbine out of commission.

CQ496. But you don't assume two would be out of commission at the same time? A. That is a small—one of the possibilities.

CQ497. What is the overhead capacity of the station? A. I don't know what you mean by overhead capacity of the station.

CQ498. I suppose it means the maximum amount that you can deliver when you haven't got any breakdowns? A. If you mean what is the amount that we have been able to carry on our station—we carry 86,000.

CQ499. Can't you go higher than that? A. I don't believe so—oh! may be for a temporary period, fifteen minutes or an hour, something of that kind we might carry a load in excess of 86,000.

428

 $Jesse\ E.\ Gray -\!Rebuttal -\!Redirect$ 

Mr. Dodge: That is all.

Q500. Mr. Chairman Bliss: Mr. Stanwood testified that your log showed that 95,000, I think he said—— A. I believe Mr. Stanwood is in error, I believe that he is in error.

Q501. Your best knowledge there, and you have access to those records, is 86,000? A. 86,000 is about the maximum that we can carry on our station.

Mr. Stanwood: Did carry? Mr. Gray: Did or can.

431

Q502. Mr. Chairman Bliss: You spoke this morning about certain contracts you had with the City of Providence and with the East Providence Water Company, and some other similar contracts; those are based upon using electricity at off-peak hours, and that you have a capacity to supply it? A. Yes; they are not required to use electricity over the peak without request.

Q503. There is no such provision with reference to the Attleboro Company? A. No, sir.

Q504. They are entitled to a supply of electricity at any and all times? A. Yes, sir.

Q505. And you have to be prepared to furnish it as you would to a manufacturing plant? A. Yes, sir.

432

Q506. You have heard Mr. Fales testify as to the difference between this new rate and the old so far as it affects his company in that the rate of \$19 is based upon the primary peak, primary load of his company estimated at 3,840; that is the new charge, is it not, under this rate? A. Yes, sir.

Q507. It didn't exist in the other rate? A. No; that is a different form from the previous rate.

Q508. The rate of 8 mills is based upon the same provision as in the contract? A. That is based upon the actual production cost of electricity which would be delivered as measured at the State Line.

Q509. Is that the same amount as obtained in the contract that was made and the rate in schedule 68? A. No, sir; in 68 was the one charge rate and the price per kilowatt hour specified in that rate covering investment as well as operating costs. In the new rate the charge in two parts, one would cover investment and the other to cover operating costs.

Q510. The other difference that he stated, namely, loss due to loss of electricity by reason of the measure being made at the East Providence substation; you agree to it, do you not? A. Yes; his statements made are all true that under the old contract the electricity was measured with a meter located in Attleboro and rentals were paid by the Narragansett Company on two transmission lines, that is, on a transmission line owned by two companies—a certain allowance was made for substation operation.

Q511. Under these other contracts you have that we have spoken of—are those based on a flat rate same as the Attleboro contract? A. The Atlantic Company contract is not; the charges under that contract consist of two parts, an investment charge based on a valuation of that part of the plant properly chargeable the Atlantic Company and a kilowatt hour charge based upon the cost of generating electricity. In that particular case the contract is what is known as an ordinary—known as cost-plus

134

437

contracts. The price varies each month dependent upon the cost for that particular month.

Q512. Have you any other contracts that are made upon the same basis as this Attleboro contract? A. No, sir.

Q513. Did you have any others—at the time you entered into the Attleboro contract? A. No, sir.

Q514. How did you come to make this on the basis of a flat rate? A. I believe that was the type of contract that was desired by the Attleboro Company although I am not sure of that statement.

Q515. You are not going to do it again, are you? A. No. sir.

CQ516. Mr. Dodge: That price named in the contract of 1917 was designed to cover all of the items which your rate 125 is designed to cover? A. It was designed to, yes.

CQ517. And this item which you are entering here of \$19 per kilowatt in demand was supposed to be covered in your flat rate named in the old contract? A. We hoped that it was, yes.

CQ518. And you expected that during the first part of the contract period there would not be a profit from it but that there would be an extra profit in the later years of the contract? A. I would not say that it was anticipated that there would not be a full return during the earlier years and that there would be more than a full return during the later years but during the entire period it would equal a full return.

CQ519. And if I understood your testimony this morning and in regard to 1923 and the estimate for 1924, even assuming that all your elements of ap-

140

portionment are properly figured the contract came very near—the old contract came very near to paying its way if you took out the 8 per cent. return, that is, I think, your difference? A. Approximately between \$4000 and \$6000.

CQ520. Which is a small percentage of the total amount involved; so that that contract has not operated very differently from what you figured? A. I should say so; I should say that it had when it shows a loss of \$50,000 in one year and which loss we estimate will be greatly increased.

CQ521. I see you have your old habit of arguing your case; I am speaking about not loss of the full 8 per cent. which you didn't anticipate during the first years of the contract? A. Yes; but I stated that we did anticipate some return.

CQ522. But not what all your \$50,000 would yield to you? A. Not the full 8 per cent.

CQ523. Now, as a matter of fact, both you and your associates told Mr. Fales and Mr. Goldthwait when you made this contract that you didn't expect to make any profit during the first part of the contract period? A. No, sir.

CQ524. Would you say you didn't say that? A. Yes, sir.

CQ525. That is one point you criticize of Mr. Fales' testimony? A. Yes, sir; if Mr. Fales testified that we didn't expect to make any return in the first ten years.

441

Mr. Chairman Bliss: I think Mr. Fales testified that he didn't feel sure, 2 or 3 per cent. I made this note; he said it was agreed by Mr. Gray and Mr. Lisle that the contract would not be fully profitable at the first half of the

period but it would be made up by increased demand in the latter half.

Mr. Dodge: How is that, Mr. Fales?

Mr. Fales: It is as the Chairman stated; they didn't expect to make a full profit but a small profit on the first half of the contract, which would be made up in the latter part.

Q526. Mr. Chairman Bliss: Mr. Gray, if this had continued at the rate unit cost of \$45 how would your contract have worked out in view of other conditions that have arisen? A. I think we would be all right.

443

Q527. You don't think you would be here? A. No, sir; if the plant cost had remained at that level.

Q528. Up to that time what had been—up to the time you entered into the contract what had been the development of unit cost of your plant? A. They had been downward, and that was the experience throughout the country.

Q529. During the period of, say, three years or five years before 1917 do you recollect what the unit costs were? A. I recollect that there was a gradual tendency downward of unit cost of all steam generating stations.

444

Q530. Under this contract you entered into you had the benefit of any advance or any cheaper methods of producing electricity, did you not? A. Half of it.

Q531. Part of the benefit went to the Attleboro?

A. Went to the Attleboro Company.

Q532. Have there been any such benefits accrue?

A. No substantial ones.

Q533. I supposed you advised—you were one of the advisors of your company, were you not, in reference to the preparation and entering into this contract? A. Yes, sir.

Q534. And you feel that the increased unit cost there and the permanent increase in those unit costs were things which you could not foresee in connection with this contract? A. Yes, sir.

Q535. Do you think they could have been foreseen by the exercise of reasonable judgment? A. They were not foreseen by contracting parties all over the United States.

Q536. Do you know of any contracts similar to this that were negotiated by utilities companies in this neighborhood at that time? A. I know that throughout the United States there has been a very general and extensive increase in rates due to the war conditions. That has been almost universal in every State in the United States for several years, starting in about 1918.

Q537. Now, under your original contract it was your understanding, was it not, that in the first half of that contract, the earlier years of it, you would get the smallest percentage of return? A. We would make less per average return, we would make more during the later years of the contract. That was not to be very large because your price again would be your better utilization of your transmissions lines and possibly some advantage in generating costs.

Q538. Under the provisions of the rate schedule 101, and again under the provisions of rate schedule 125, you propose to make that return immediately? A. Yes, sir.

446

Q539. Bring your rate to a full return and to maintain it so during the remaining period of the contract? A. I believe that is the proper way.

Q540. Would not that leave you in a position where you will be far better off than you would have been if your original contract worked out according to your anticipation? A. No; it was a worse position because of the loss that has already gone by. We haven't contemplated making up. The rate we are now filing does not contemplate making up any past losses which are admitted by everyone. We are endeavoring to make ourselves whole from now on so that we will be even-if the original contract had worked as anticipated.

449

Q541. At the termination of this contract period do you propose to depreciate the value of that transmission line during the period of the contract is in existence? A. No; that would not be fully depreciated, if it were we would have to give more than the depreciated rate that we have allowed.

Q542. What rate have you allowed? A. Three

per cent.

Q543. Over a period of twenty years? A. Yes.

Mr. Graustein: It is 3 per cent. on the depreciated value not 3 per cent. on the original? Three per cent. on the depreciated value.

450

Q545. Mr Chairman Bliss: You deduct the depreciation each year and then apply the standards to the remainder? A. Yes, sir.

Q546. Mr. Graustein: Mr. Gray, as I understand, under the original 68 rate the charge is wholly for a kilowatt hour; that charge today with

an adjustment, that charge would be somewhere between 10 or 11 mills. This schedule substitutes two charges, one of 8 mills and the other \$19 kilowatt demand; is that correct? A. Yes, sir.

Q547. One other thing; the new rate is based

entirely on costs? A. Yes, sir.

Q548. In that respect it is identical in principle with the rate charged to the Atlantic Power Company? A. Yes, sir.

Q549. And it is identical in all its application: with the exception of the difference between one mill and .65 of a mill? A. Yes, sir.

CQ550. Mr. Dodge: How long has the demand been stated at that figure, at 19,000, in estimating the Atlantic Company's apportionment of the generating plant? A. Just the last month.

CQ551. What was it before that? A. Slightly less than that.

CQ552. It has always been less than that, has it not? A. It never goes down after arising at the highest point; it moves up constantly but it never recedes during the period of the contract.

CQ553. What was it, six months ago? A. 15,-500 I think is the exact figure.

CQ554. In connection with the other paper which you are going to turn in, will you turn in a table showing the record as given by your log of the maximum output? I think you have those figures. A. For what period do you mean?

CQ555. I thought you only had the log for a few months. A. Oh! no; we make a log sheet each day which gives the load every fifteen minutes for that day. I can give you that for any period for a great many years past.

# Proceedings of June 16, 1924

CQ556. Give us the maximum for each month for 1923? A. The maximum peak at any time during the day?

CQ557. Yes; for each month for 1922. A. (No answer.)

## Adjourned

Providence, R. I., June 16, 1924.

Met pursuant to adjournment.

# 455 Present :

Mr. Commissioner Bliss, Chairman. Mr. Commissioner Rodman. Counsel present as before.

Mr. Chairman Bliss: This matter was continued from a week ago for the presentation of additional exhibits and for argument in case no further testimony was to be presented. There was filed with the Commission certain exhibits and I assume they have been supplied to counsel for the Attleboro Steam & Electric Company—three certain exhibits, one entitled

456

Peak loads carried by station and turbine out of commission due to accident—that may be marked "Exhibit No. 8."

A second exhibit, Highest peak load in each month—that also was furnished you?

Mr. Dodge: I think so.

Mr. Chairman Bliss: ——covering the period from January 8, 1923, to May 20, 1924; this may be marked "Exhibit 9."

And a further statement entitled, Loss to the Narragansett Company under Schedule 68, consisting of some 27 sheets of statements and tabulations; that may be marked as "Exhibit 10."

I think those exhibits should be verified by the witness who prepared them and also to give an opportunity for such cross examination as may be desired.

458

JESSE E. GRAY is recalled by Mr. Graustein:

Q558. Mr. Gray, Exhibits Nos. 8, 9 and 10, entitled Peak load carried by station with turbines out of commission due to accident—Highest peak load in each month—and Loss to Narragansett Company under Schedule 68, were prepared under your directions? A. Yes, sir.

Q559. Are the statements, purporting to be statements of fact, contained in those three exhibits correct? A. They are.

Q560. And are the estimates contained in Exhibit No. 10 correctly figured? A. They are.

Q561. Are the investments of costs shown for the years 1918 to 1923, inclusive, based on actual cost since 1914 and appraisal as of that date? A. Yes, sir.

Q562. Are those values which are given in Exhibit 10, are they based on actual costs since 1914 and appraisal in 1914—are those your book figures? A. Those are the book figures.

461

Q563. How do those book figures compare in the aggregate with replacements costs less depreciation? A. In the aggregate they would be less.

Q564. How do they compare with the money actually invested in the properties? A. These would correspond with the money actually invested.

Q565. They correspond very closely? A. Yes.

Q566. That is but a variation of, perhaps, not more than 5 per cent? A. Less than 5 per cent.

Mr. Graustein: The Commission suggested the submission of one exhibit which is not included in those which the Chairman enumerated and which I assume therefore has not been filed—that was an exhibit indicating the trend of construction costs in generating stations over a period of years, and I should like if it is not objected to to introduce as exhibits some charts which I believe Mr. Dodge has seen, perhaps not quite recently. We were delayed in getting those.

Mr. Chairman Bliss: They may be presented if they can be presented through a witness.

Mr. Dodge: There was also the General Electric chart.

462 Q567. Mr. Graustein: I understand some charts have already been filed with the Commission? A. No, they have not been filed.

Q568. Since the last hearing, Mr. Gray, have you communicated with the General Electric Company? A. Yes, sir.

Q569. Requesting from them information? A. Yes, sir.

Q570. In regard to the trend of costs for various types of electrical machinery? A. Yes, sir.

Q571. Have they furnished you with information of that character? A. They have.

Q572. I will hand you a sheet entitled Transformers for synchronous convertors showing a draft indicating prices from 1914 to 1923, inclusive, was that sheet furnished you by the General Electric Company? A. It was.

Mr. Graustein: May I introduce that as an exhibit?

Mr. Chairman Bliss: I understand that is applicable to the particular apparatus there.

Mr. Graustein: Yes, Mr. Chairman, and we have similar drafts which I propose to introduce showing similar trends in the case of various other types of apparatus.

Mr. Chairman Bliss: Have you any way of indicating the general trend of all the electrical apparatus?

Mr. Graustein: I have an article in the Electrical World containing a great many—fifteen drafts—showing not only electrical apparatus but bricks and labor, boilers and so on—all the items.

Mr. Chairman Bliss: Perhaps you had better introduce the particular exhibits you have and then we will consider that.

Mr. Graustein: If we had been able to get the information more rapidly we should have assembled it but this was the best Mr. Gray was able to do in the time available. Then this may be introduced, if I understand you correctly? 164

### Jesse E. Gray-Direct

Mr. Chairman Bliss: Do you want to introduce that as a separate exhibit? They are attached together.

Mr. Graustein: Perhaps I will attach them together as "Exhibit 11."

Mr. Dodge: The first you spoke of was general construction costs?

Mr. Graustein: No; synchronous convertors.

Mr. Dodge: You had one you said represented general construction costs.

Mr. Graustein: That is this (indicates).

Mr. Dodge: I haven't seen that.

Mr. Chairman Bliss: Sheet 1, Exhibit 11, would be Trend of synchronous convertors; and sheet 2——

Mr. Graustein: Sheet 1 is really Motor generator sets; I didn't have them in the order of their numbering.

Q573. Is that a sheet furnished you by the General Electric Company? A. It is.

Q574. And that is sheet 1 of Exhibit 11; have you sheet 2? Sheet 3 is Transformers with synchronous convertors which has already been put in evidence. Sheet 4 entitled Curtis steam turbine with excitors; is that sheet furnished by the General Electric Company? A. Yes.

Q575. Sheet 5 is Railroad switchboards; is that sheet one which was furnished you by the General Electric Company? A. It is.

Q576. Sheet 13 is Alternating current generators; was that furnished you by the General Electric Company? A. It was.

Q577. Sheet 14 is Direct current generators; was that also furnished by the General Electric Company? A. It was.

Q578. Have you any other sheets of that character furnished you by the General Electric Company? A. No, sir.

Mr. Graustein: Then, Mr. Chairman, I offer sheets 1, 3, 4, 5, 13 and 14, indicating costs of various types of electrical apparatus from 1914 to 1923 furnished by the General Electric Company.

Mr. Chairman Bliss: Those may be marked "Exhibit No. 11."

Mr. Graustein: If the Commission is willing to accept a copy of the Electrical World, issue of April 14, 1923, an article therein by William H. Handy, consulting engineer of Baltimore, Maryland, containing various drafts showing costs of electrical construction, I should like to submit that for what value the Commission may find in it.

Mr. Chairman Bliss: Of course, we have power under the statute to accept testimony of that kind where it is helpful. I do not know whether there is any dispute about the general trend.

Mr. Dodge: It looked all right to me, Mr. Chairman, that is, the curves may be substantially like the others.

Mr. Chairman Bliss: Well, it may be intro- 471 duced in the absence of specific objection to it. It does not have a direct bearing upon this proceeding but indirectly it affects the general proposition.

Mr. Graustein: The page is 859.

Mr. Chairman Bliss: It may be marked "Exhibit 12."

Q579. Mr. Graustein: Mr. Gray, I hand you a sheet marked, entitled Narragansett investment measured by its securities; in regard to that I want to ask you this—can you tell me the amount of the Narragansett investment in plants which is attributed as to December 31, 1923, to service to the Attleboro Company? A. \$466,603.

Q580. Can you tell me the percentage that is of the total investment in plants of the Narragansett Company? A. 2.8 per cent.

Mr. Graustein: I think of no more questions.
Mr. Chairman Bliss: Do you want to present that sheet in evidence?

Mr. Graustein: Not for the moment; I would like to present that through Mr. Hall.

Mr. Chairman Bliss: Any questions, Mr. Dodge?

CQ581. Mr. Dodge: Mr. Gray, in the bills which your company rendered to the Attleboro Company under the rate of 101, while that was claimed by your company to be effective, the peak primary load of your plant was in every case figured at 60,000, was it not? A. Yes, sir.

CQ582. And you have already testified that the Attleboro demand was figured at 2,000? A. Yes, sir.

CQ583. So that in all those bills you were apportioning to Attleboro, so far as the generating plant capital costs are concerned, 1/30 of that? A. Yes, sir.

CQ584. Now, in your new exhibits which you have produced here and on which your new proposed rate 125 is based, you have charged interest

473

in various places at 6 or 7 per cent., have you not? A. Not that I know of.

CQ585. Do you know what the average rate of interest actually paid by your company in 1923 was? A. No.

CQ586. It was less than 6 per cent., was it not borrowed money? A. I couldn't testify to that.

CQ587. You have no knowledge of it at all? A. No, sir.

CQ588. You have charged it to your costs here, have you not, in computing the new rate, an item of interest on fuel on hand? A. Yes, sir.

CQ589. At 7 per cent.? A. I believe so, 7 per cent.

476

CQ590. You have charged interest on your own payments on invoices in advance, have you not? A. Yes, sir.

CQ591. Without crediting any discount which you may have obtained from money payment in advance? A. I couldn't testify as to that.

CQ592. You have charged in the whole construction costs interest at a definite rate regardless of what the company paid, haven't you? A. I couldn't testify as to that.

CQ593. Don't you know that you have charged in interest at 6 per cent. as whole construction, and part of construction? A. I know interest on construction has been charged but I couldn't testify as to the rate.

477

CQ594. You didn't make that up yourself? A. No, sir.

CQ595. You did, yourself, figure interest on fuel stock on hand at 7 per cent.? A. I know that was figured at 7 per cent.

CQ596. Now, under the original contract of 1917 and as a part of the inducement to the Attleboro Company to make it, your company built the transmission line to the State Line and made no charge to the Attleboro Company in respect to that? A. No, sir.

CQ597. In addition you paid the Attleboro Company a certain percentage of the cost on the line which it built from the State Line in Massachusetts? A. We built the entire line and sold a certain section of it to the Attleboro Company and to the Seekonk Company.

CQ598. And those were sections in Massachusetts? A. In Massachusetts; yes, sir.

CQ599. And you allowed an annual return to the Attleboro Company on the amount which it paid you for its part of the transmission line? A. Yes, sir.

CQ600. Now, under rate 101 when you billed to the Attleboro Company you, for the first time, included a return upon the transmission line in Rhode Island and figured in the cost of that at \$53,000; do you remember that? A. The return was supposed to be there all the time. We figured it as a separate item after Schedule 101 went into effect.

CQ601. That is, you estimated when you made the original contract that you were going to get enough back to reimburse you for the line in Rhode Island? A. Yes, that is the rental charge in—would have been in the rate itself.

CQ602. Now, when it came to rate 101 of 1921 you then charged your transmission in Rhode Island at \$53,000; do you remember that? A. No, I don't remember the figure.

CQ603. You know that you have in your new rate of 125, in figuring that you have put in that transmission line at \$73,000? A. Yes, sir.

CQ604. And that was increased over what you had been billing it to us at under rate 101? A. It might have been.

Mr. Chairman Bliss: Let me get clear what part of the transmission line you mean.

CQ605. Is it not the Narragansett transmission line in Rhode Island from your East Providence substation to the Massachusetts-Rhode Island line? A. We constructed a transmission extending from our substation to the vicinity of the plant of the Attleboro Company, we acted as a contractor. That part which laid in Attleboro was sold to the Attleboro Company; that part in the territory of the Seekonk Company, to the Seekonk Company.

Q606. You mean in the town of Seekonk, State of Massachusetts? A. Yes, sir; the part in Rhode Island was retained by the Narragansett Company.

Q607. Now, when you speak of \$73,000, what portion of the line do you refer to? A. That is the part which lies wholly in Rhode Island.

Q608. It does not include any of the investment in Seekonk in the State of Massachusetts? A. Might I explain that more fully? Under the contract with the Attleboro Company the Narraganseett Company agreed to build a line for, I believe, \$4,500 a mile. Considerable time elapsed before the line was actually built and its cost had increased so that the cost of the line per mile was more than the \$4,500 to be termed as the selling price—the \$70,000 odd dollars. The cost of that part of the

182

line in Rhode Island is the balance of the total cost after deducting the payments received from the Attleboro Company and the Seekonk Electric Company.

CQ609. Mr. Dodge: So that it is in effect recouping the Narragansett Company for part of the loss which it had suffered on the sale price of the line in Massachusetts, which price was agreed upon at the time; it actually cost you more than you sold it to Attleboro for, and so in your proposed new rate you make up that loss? A. I suppose that would be one way of expressing it.

CQ610. Now, you didn't do that under rate 101; there you charged in the transmission line at \$53,000 instead of \$73,000, didn't you? A. I don't recollect.

CQ611. You know it was less than \$73,000? A. Why, I imagine so.

Mr. Dodge: I think that is all.

Q. Mr. Chairman Bliss: I want to get this clear if I can. Who put the investment into the Seekonk Electric Company from the State line to the point where the Attleboro Steam & Electric Company line take the current? A. The Narragansett Company built that line.

Q612. They own it now? A. No; they sold to the Seekonk Company, Seekonk Electric Company at \$4,500 a mile.

Q613. You say the line in Rhode Island is \$73,000; how did you arrive at that figure? A. By taking the total cost of the line and deducting therefrom the sum of the payments made by the Attleboro Company and the Seekonk Company;

that represents the actual money which the Narragansett Company has now invested in that line.

Q614. How much money has the Narragansett invested in that portion of the line owned by the Seekonk Electric Company? A. None.

Q615. Who has that investment, the Seekonk Electric Company? A. The Seekonk Electric Company; they paid for that line.

Q616. But that is a subsidiary to the Narragansett? A. Yes.

Q617. You control that company through the ownership of its entire capital stock? A. Yes, sir.

Q618. What is the amount of the investment of the Seekonk Electric Company of that portion of their line which supplies on the Attleboro from the State Line to the Attleboro line? A. I don't think I have that figure available here.

Q619. It was \$4,500 a mile for the transmission line? A. Yes; times the number of miles.

Q620. Now, the total number; you don't know the total cost then, the total actual cost of the construction of the line from East Providence to where you deliver this electricity to the Attleboro Steam & Electric line? A. That—no, I haven't the total here.

Q621. Does it appear in any of the exhibits you have presented here? A. No.

Q622. Mr. Graustein: Just a moment; the point of delivery is the State Line, is it not? A. In schedule 125.

Q623. Mr. Chairman Bliss: What I am trying to get at is the investment, either directly or through its subsidiaries, of the Narragansett in transmission line facilitates to carry its electricity from the East Providence substation to the point it

488

is actually delivered to the lines owned by the Attleboro Steam & Electric Company; you say that does not appear in any of your exhibits? A. I don't think so.

Mr. Graustein: On our theory the Narragansett Company could make a charge for the investment made through the Seekonk; as far as this contract is concerned we have treated the Seekonk as an entirely outside party.

Q. Mr. Chairman Bliss: How does the Seekonk get its return? A. They charge rent on use of its transmission line.

Q625. Who pays the rental? A. The Attleboro, presumably.

Q626. That is part of the terms of the contract, that they pay rental? A. Under schedule 125 there is no direct—we filed a schedule and provided under that schedule to get electricity to the State Line of Rhode Island, and that is as far as we carry the electricity. Presumably the Attleboro Company would take the electricity at that point, and the most convenient way at the present time is undoubtedly by the running of a transmission line from the Seekonk Electric Company.

Q627. Do you mean to say that, if this proposed schedule which is under consideration becomes effective, the Attleboro Steam & Electric Company are left without any relationship from the State Line to the point where their line construction commences and they have got to negotiate with your subsidiary company, the Seekonk Electric Company, in order to continue service from the Narragansett? A. That is what the rate contemplates.

Mr. Graustein: My impression is that the contract between the Attleboro and the Seekonk would probably remain in effect; that is to say, this new rate would change the price charged by the Narragansett, that the Attleboro would still be entitled from the Seekonk as against the Seekonk to use the Seekonk line on the basis specified in that contract, so that is taken care of outside the rate.

Mr. Chairman Bliss: Is that apparent in any of the exhibits?

Mr. Graustein: The contract itself is Exhibit 1, and that covers that feature of it.

194

CQ628. Mr. Dodge: I want to ask you this, Mr. Gray—the fact is you sold a part of this transmission line to the Seekonk Company your subsidiary at a loss? A. Yes.

CQ629. And that loss which you there made you now seek to charge up to the Attleboro Company in this new rate? A. It is being charged in that line; yes, sir.

Q630. Mr. Chairman Bliss: What was the loss? How much did the actual construction cost exceed the estimate of cost? A. I haven't that figure available; it could be procured very shortly.

Mr. Graustein: I think we have those figures.
Mr. Chairman Bliss: Of course, I would like
to have this thing brought out definitely.

495

Q631. Mr. Gray, will you refer to Exhibit 10—on page 5 of that exhibit? A. Yes, sir.

Q632. In the year 1920 the unit for generating and delivery cost was .0116329? A. Yes, sir.

Q633. In the following year 1921 it became .0098456? A. Yes, sir.

Q634. Why did that sudden drop in unit generating and delivery cost come about? A. That was mainly through the decrease in fuel costs.

Q635. The following year, 1922, there was a similar drop; to what was that due? A. I don't believe I can state offhand why the generating and delivery cost has a downward tendency. I believe it is principally on account of fuel costs and increased efficiency.

Q636. Was it due in any respect to using larger generating units in your generating plant? A. It might be.

Q637. When did you place in installation the first of your large turbines? A. I don't believe I have that figure available.

Q638. Didn't the use of those turbines operate to reduce the generating costs of electricity? A. Oh, yes.

Q639. Then the second one of those turbines must have been placed in use some time during this period of three or four years? A. Yes, sir.

Q640. Do you remember when that was? A. No, I don't remember the date.

Q641. Now, in the year 1918 you show that there was a net loss to your company of \$38,781.04? A. Yes, sir.

Q642. That includes return on investment of full 8 per cent.? A. Yes, sir.

Q643. And the next year in 1919-1918 covered a period of nine months? A. Yes, sir.

Q644. In 1919 the net loss to your company was \$48,735.60? A. Yes, sir.

497

Q645. Including a full return to your company?

A. Yes, sir.

Q646. At 8 per cent.? A. Yes, sir.

Q647. Now, in making your estimates at the time you entered into this contract with the Attleboro Steam & Electric Company you anticipated a loss during the earlier years of the operation of that contract, did you not? A. Less than our full rate of return; yes, sir.

Q648. What loss in dollars and cents did you anticipate for the year 1919? A. We didn't figure the loss that way; we averaged that price for the 20-year period which would return for the entire period an 8 per cent.

500

Q649. Did you lay out a curve to show the losses as they would appear during the earlier years of the contract as against the later years? A. No; we established what we thought would be the average unit cost of plant and average generating costs and of course, the assumption that we would increase our efficiency during the later period of the contract, and that the unit costs would have a downward tendency, the income must of necessity be less than the full return during the earlier periods of the contract.

Q650. When did you first encounter these rising costs on machinery there, which increased your costs of operation so far as machinery was concerned, investment in machinery of plant, to double what it was before the war, when did you first meet with these increased costs? A. If you will allow me to get a paper there—in 1920 we contracted for a turbine at—a 47 K. V. A. turbine at a greatly increased price over the previous one.

Q651. Did you—contracted for it; you paid for it after it was installed, didn't you? A. Yes.

Q652. That would not be apparent in the 1920 figures you presented here, would it? A. That cost would not get into 1920.

Q653. Did you, in the years 1919 or 1920, actually pay out these increased costs, actually make this increased investment which would be apparent in this tabulation here, which you present here in Exhibit 10 on page 5? A. I won't say; there had been a great deal of capital invested prior to 1920.

Q654. You did meet with increased costs when you constructed this line in order to start furnishing this electricity in 1918? A. Yes, sir.

Q655. At that time your material costs were very much higher than the cost at the time you had estimated the work? A. And at the time we contracted to build it.

Q656. Now, the fuel costs were automatically transferred to the Attleboro Steam & Electric Company under the terms of your contract, were they not? A. Yes, sir.

Q657. Were you, under the terms of that contract, amply protected so far as fuel costs were concerned? A. I believe we were.

Q658. So that so far as the contract was concerned there was no advantage to you in decreased fuel costs and there was no injury to you on account of increased fuel costs? A. Assumed that we used—yes, I think that statement will be correct.

Q650. And that was during the entire period of the contract upon which the original rate was based? A. Yes, sir.

Q660. Why is it that you did not attempt to protect yourselves in some way against the in-

503

creased costs of generating machinery and plant as well as against an increased fuel cost? A. We didn't anticipate an increased cost in machinery.

Q661. It practically amounted to this, you guessed wrong and the Attleboro Company guessed right on what the future was to bring forth in regard to costs of generating electricity so far as the machinery and plant involved was concerned? A. We guessed wrong.

Q662. Now, when did you make your final guess—when did you enter into this contract and execute it? A. The report which we submitted is dated 1916; the data on which it is based was prior to the time of submitting the report.

506

Mr. Dodge: The contract was made, wasn't it? A. I think the question was, What time did we base the costs?

Q664. Mr. Chairman Bliss: The contract was entered into, the contract being Exhibit 5, on the 8th day of May, 1917? A. You asked what time did we prepare the figures?

Q665. Yes. A. That was 1916.

Q666. How long did the period of negotiation precede the execution of the formal contract? A. I should say between six months and a year.

Q667. And the data that you used covered what 507 period, that is, what did you use to guide you?

A. Prior to the fall of 1916.

Q668. Hadn't the cost of generating machinery gone up prior to 1916? A. I don't think it had in our own experience.

510

Q669. The war hadn't affected those costs? A. Not as far as our own experience was concerned.

Q670. Was that because such apparatus as you were receiving was being delivered under contracts that had been entered into prior to the war? A. No; I believe that electrical apparatus was rather slow it responding to the war conditions.

Q671. Then what you mean to say is that at the time you entered into this contract there was nothing in the then costs of generating machinery and material that would give you warning of this great increase and continued high level of costs? A. No; I consider there was not anything that gave us any warning. The assumption, I think, was, I think at that time was that the war might possibly be of short duration, if it were, that we might not have to add largely to our generating plant until, if there were a period of high prices, we might charge it.

Q672. In your Exhibit 11, upon sheet 1, Railway motor generation sets; what were those used for? A. We used none of those.

Q673. That has reference to street railway power? A. Street railway companies.

Q674. Now, you do use the transformers for synchronous convertors to a considerable extent? A. No, not to—why, to a small extent; in our direct current wholly.

Q675. And those costs would have no reference whatever to this contract? A. No.

Q676. Curtis steam turbine with excitors; is that a type of turbine which you have? A. We use the Westinghouse turbines.

Q677. So that that sheet would have no significance so far as this particular case is concerned? A. Except to show the trend of turbine prices.

Q678. That showed that at the end of the year 1916 that the cost of such generator sets was 20 per cent. higher than it was in 1914; assuming 1914 is normal you do not consider that of sufficient signifiance? A. We did not have that data at that time.

Q679. Somebody must have had it at that time in order, at the end of 1916 in order to make this chart, it must have been a matter of record at that time what the cost was—was it not? A. It probably was, if it was investigated.

Q680. Railway switchboards; that, of course, does not concern this particular case, does it? A. No; except on the price, it may be typical of the price of our switchboards.

Q681. That shows, at the end of 1916, on that 110 per cent. to the 1914 costs. Here is a comparison of prices of the A. C. Generators, sheet No. 13; that shows that at the end of the year 1916 such costs were 130 per cent. of the 1914 costs which are assumed as normal? A. At the end of the year, it may be entirely possible that the prices started to increase late in the fall, subsequent to the preparation of our data.

Q682. What I am trying to find out, Mr. Gray, is this, I am trying to find out what information you had or ought to have had at the time you made this contract, and I am trying through these exhibits to indicate what was the fact in regard to these costs, if it was the fact, and I assume you stand back of these exhibits where you have presented them? A. Yes, sir.

512

Q683. You think that it was earlier than the fall of 1916 that you got your data to go upon this? A. It was prior to the fall of 1916.

Q684. About when? Let us fix it for the purpose of studying these exhibits. A. The report was dated November 20, 1916; that is the date that the report was submitted to the Attleboro Company.

Q685. When do you think—you studied the data up to a certain point prior to making a report, didn't you? A. Probably about the summer time.

Q686. About the middle of the year? A. Yes; I should say so.

Q687. That shows that alternating current generators were about 122 per cent. of the 1914, prewar normal costs; you didn't consider that as sufficient significance to make any allowance for it? A. If the increased prices were only temporary and it was not necessary for us to increase our plant during that time it would have no effect on us.

Q688. Do the D. C. generators have any reference to this particular service? A. No, str.

Q689. I notice that in practically all the exhibits show—the sheets contained in Exhibit 11, commencing in the early part of 1916, there is a sharp advance in cost; is not that true? A. Well, this curve apparently—

Q690. Is not that true of all the exhibits? A. It is true of all the exhibits, but I believe the first four sheets from inspection seem to be one point for each year, and that is connected—and in case of a rising price would indicate something higher than during the year; in the middle of the year, for instance, than the beginning of the year although that might not necessarily occur. That is an extreme increase in price in December. As

516

far as the platting of these curves is concerned that would show increased prices in the middle of the year whether there were such an increase or not, the last two curves not platted of shorter periods than a year probably.

Q691. The last two sheets show the same tendency as the earlier sheets? A. Yes, sir.

CQ692. Mr. Dodge: Do I understand you to say, Mr. Gray, while you reported on this in 1916 your company actually executed the contract in May, 1917, without any investigation of the rapidly increasing prices of everything? A. I know of no such investigation.

CQ693. You claim your company was ignorant of the fact that this contract was made at a period when prices were rising more rapidly than almost any time in history? A. We knew prices had an upward tendency. If it were not necessary for us to increase our plant during the period of high prices it had no effect on us.

CQ694. Didn't you hear it suggested that your company had it in mind in persuading Attleboro to come into this contract to apply to the Commission here to change its terms? A. Would you repeat that question?

CQ695. Did you ever hear it discussed among your officials at the time this contract was being made and the Attleboro Company was persuaded to sign it, that it would not be binding on your company because you could come to this Commission to get it changed? A. It was not discussed.

CQ696. It wasn't discussed at that time? A. No, sir.

CQ697. Well, the situation which existed at the time, in May, 1917, as these curves show, was indi-

518

cated perfectly plainly the exact situation which has resulted, didn't it, namely, a rapid increase, temporarily at least, in prices in the period immediately after the contract was made? A. I would not say so.

Mr. Dodge: I don't think of anything else.

#### FRANKLIN L. HALL

Franklin L. Hall, having been duly sworn, testifies as follows:

Direct Examination by Mr. Graustein:

Q1. You are connected with the Narragansett Company? A. Yes, sir.

Q2. In what capacity? A. Secretary and treasurer.

Q3. Are you familiar with the market value of the company's stock? A. Yes, sir.

Q4. Do you know what it was on December 31, 1923? A. Approximately \$64.

Mr. Dodge: I object. I understand that is a factor that is not regarded as of any importance in rate cases.

Mr. Graustein: Some justices of the Supreme Court of the United States seem to think it is important.

Mr. Dodge: I don't think so.

Mr. Chairman Bliss: I think in the case of Smith v. Ames they have said you could consider those things.

Mr. Dodge: They said so in Smith v. Ames but I don't think it is received in rate cases at all.

Mr. Graustein: I think I can submit decisions-

Mr. Dodge: —of the Supreme Court of the United States?

Mr. Graustein: Yes.

Mr. Dodge: I should be very glad to receive them. Perhaps it would be shorter to waive my objection to this.

Mr. Chairman Bliss: I do not see how it can do any particular harm to the Attleboro Steam & Electric Company. We will permit it to be introduced there.

524

Q5. Mr. Graustein: You may answer the question. A. Approximately \$64 a share.

Mr. Graustein: I may say in the Georgia Railway case, decided June 11, 1923, it was, I believe, the opinion of the majority of the Court that the value of securities is a factor to be considered.

Mr. Dodge: That is the very case where the Commission said they absolutely refused any consideration.

Mr. Graustein: That is all, Mr. Hall.

525

Q6. Mr. Chairman Bliss: As of what date was that, Mr. Hall? A. December 31, 1923.

CQ7. Mr. Dodge: That is, stock par value 50 was selling at \$64 a share? A. Yes, sir.

CQ8. And it sells about that price now? A. About \$65, the present time.

CQ9. The tendency of recent years has been upward, has it not? A. No, sir; the tendency of recent years, up to the war, was upward; from the time of the war to the present time it has been downward. The last year or two was slightly upward.

CQ10. What was the stock selling for in 1922, the last day of 1922? A. I should say \$64 to \$66 a share.

CQ11. The price, I take it, more or less turns on the interest rates for the time being? A. Somewhat, yes.

527

CQ12. That is, it sells now on the 6 per cent basis. A. Just about that.

Mr. Graustein: That is all.

Q13. Mr. Chairman Bliss: During this entire period it has paid an 8 per cent. dividend on the par value of \$50? A. Yes, sir.

Mr. Chairman Bliss: Is there anything else? Mr. Graustein: Nothing else.

Mr. Dodge: I have some figures about the Seekonk.

## 528 F. J. Stanwood is recalled by Mr. Dodge.

Q97. Mr. Stanwood, does your examination of the books of the Narragansett Company enable you to state how much the cost of the transmission line from Providence all the way through to Attleboro exceeded the cost of the line in Rhode Island plus the same actual charge to Seekonk and Attleboro at the rate of \$4,500 a mile? Or to put it in another way, what was the cost of the Seekonk and Attleboro part of the line in excess of \$4,500 a mile? A. You ask what the total cost of the line was?

Q98. I shall ask you that further. A. We examined the construction ledger of the Narragansett Company and found on the heading marked X1595 these totals: \$102,343.93 for the total cost of the entire line from East Providence to Attleboro.

Q99. And that is how many miles long? A. Roughly twelve something, I think.

Q100. Something over \$8500 a mile? A. The cost of, the cost per mile, after subtracting from the 102 the amount paid by Seekonk of \$11,745 and \$19,530 by the Attleboro Company, the remaining mileage being 9.6 miles divided into—what I was trying to answer was that it cost about \$8,200 a mile.

Q101. How much was the mileage in Attleboro and Seekonk? A. The mileage in Attleboro was taken at 4.34 and in Seekonk 2.61.

Q102. Just about seven miles? A. Yes; nearly seven miles.

Q103. And at the average rate of construction of the entire transmission line that would amount to about \$57,000? A. Yes.

Q104. For which the Narragansett Company charged under the contract \$4,500 a mile or a little over \$30,000? A. \$31,000.

Q105. Then the difference between the costs of the operating line in Attleboro and Seekonk and the thirty odd thousand dollars received from those two companies is how much, can you tell us? You gave me a figure, sitting down here a minute ago, some-

530

thing-\$20,000; what was that? A. \$20,000 is the difference between the value of the transmission facilities shown in the new rate No. 125 over the cost of these transmission facilities on which they ask for an 8 per cent. return in billing schedule No. 101 for 27 months.

Q106. That is, you find the cost of the transmission line has been increased some \$20,000 in this proposed new rate over and above what it was figured under rate 101? A. Yes, sir.

Q107. You haven't any figures which enable you to state just what the portion of the transmission line in Rhode Island cost? A. I could compute it in a few minutes.

Q108. We have the average of the whole distance; is there a way to tell just what the line in Rhode Island cost? A. Not from my figures accurately; we would have to do it on a division of the mileage basis, dividing the underground from the overhead and the mileage on each, and that might or might not be the correct actual cost in the sections. We couldn't obtain the actual cost.

Mr. Dodge: That is all.

CQ109. Mr. Graustein: I want to make clear one thing which I think I understood you to state-! want to be sure of it; that is, that these figures and this discussion in regard to how much the line in Rhode Island cost, as distinguished from the total line, all your conclusions are based upon an assumption that one mile in Rhode Island cost just the same as a mile in Massachusetts; is that correct? A. Just what testimony do you refer to?

533

CQ110. That which you have just given. A. The cost per mile?

CQ111. Yes. A. I didn't testify definitely of the cost per mile.

CQ112. So far as you have given any allocation of costs as between the Seekonk and Attleboro, and Pawtucket, the allocation has been based on mileage; is that true?

Mr. Dodge: I don't think he has given any allocation; that is the figure he says he has not got.

Mr. Graustein: If that question bothers you. Mr. Stanwood, I will ask you a different one. 5

A. All right. I am having difficulty with that question.

CQ113. The Narragansett figures are based on an estimated cost of \$77,000 for a transmission line in Rhode Island; do you recall that? A. Yes.

CQ114. Do you question the correctness of that figure? A. Yes, I question it.

CQ115. On what basis? A. Just the general basis that the construction of the overhead line should not be materially different.

CQ116. Materially different where? A. Between Roger Williams avenue and the Attleboro station.

CQ117. That is, you question it wholly on the theory of prorating the cost over the mileage; is there any other reason to question it? A. At the time we made this examination we investigated and saw the construction ledger which holds the itemized cost, showing all the different items, poles—and by the way, costs of building of underground,

cost of the land at Broad Street, interest on all these items; it also shows credits for the amounts paid by the Seekonk Company and the Attleboro Company, and these costs were taken from the books, and at that time I think the question was asked—I asked the question of some member of the Narragansett concern whether this \$4,500 paid the costs, and they said it did not, and more or less agreed that the costs were more than \$4,500; then the conclusion that if \$4,500 did not pay the way into the town of Attleboro then of necessity there would be an investment as to the Narragansett any way in there.

539

CQ118. That would be because of the fact you assume a division of the cost is based more or less on mileage? A. Yes, it is pretty hard to see that \$20,000 can be accounted for the 2.7 miles in the town o; between Roger Williams Avenue and the Seekonk line.

CQ119. But some of the Rhode Island mileage was more expensive to construct than the average, wasn't it? A. I should judge so—getting nearer civilization.

CQ120. More densly settled? A. Yes.

CQ121. And also some of the Rhode Island mileage was underground? A. Yes, a small block of that; we have got that block separated.

540

CQ122. So that if there is an excess of \$70,000 we don't know how much it is? A. No, no; I don't know how these contracts were let but it is quite possible that the Narragansett concern might separate the costs more closely. It would seem to have been well to have done it in the first place.

Mr. Graustein: That is all.

Q123. Mr. Dodge: Now, you are asked for—raising the question of the \$70,000 let me call your attention to two things, and ask you whether those are of any significance; in the first place, you have told us that this same item was figured at \$50,000 under the billing to us in the 125 rate? A. Yes, sir.

Q124. Does the fact that it has been increased to something over \$73,000 in this contract have any significance? A. Yes.

Q125. Is there any possible reason why that figure should increase unless this—under a new contract it was an attempt, as Mr. Gray says it was, as I understand him, to get back now out of Attleboro the loss on the sales of these transmission lines—the Seekonk and Attleboro? A. No reason to believe it was otherwise.

Mr. Dodge: That is all.

Q126. Mr. Chairman Bliss: What did you say the total distance was, the total length of this transmission line was? A. I can take these facts——

Mr. Dodge: What is the total distance?
Mr. Chairman Bliss: Give me the total distance.

A. 11.56.

543

542

Q128. And that commences where in East Providence? A. East Providence, I presume the portholes in the walls of the station underneath right approximately to the Attleboro station.

Q129. What is the total length of the Attleboro Steam & Electric Company that they paid \$4,500 a mile for? A. 4.34.

Q130. And of the Seekonk Company? A. 2.61.

Q131. And of the portion of the Narragansett, the total amount in Rhode Island there, that they constructed? A. 4.61.

Q132. You made some reference to \$8,200 a mile:

what did you have reference to? A. I thought that to be the figure, then I hesitated in the mile computation when I realized I would have to recorrect—\$8,200 is the mileage cost taken by the officer of the Narragansett Company in order to create a value of the two—this block in here, on which they would base their charges on in 101, and that is borne out by evidence in a copy of a bill that we have here. Under 101 they made charges for transmission lines and in getting the value from the East Providence station to the junction of Roger Williams Avenue they obtained it by making deductions divided by mileage in order to get that amount, just simply used for the purpose of establishing a value in making up this schedule 101.

Q133. Do you have reason to believe that they took the entire costs of this line from the East Providence substation to the end of the line where they deliver it to the Attleboro Steam & Electric Company, and then deducted from that the contract for the Seekonk and Attleboro portion, and then charged the rest of it as investment in Rhode Island? A. I have reason to believe that was the procedure.

Q134. Now, you stated that the total amount received by the Narragansett Company for the 2.61 miles constructed for the Seekonk Company was \$11,745? A. I did not see the voucher; that is the amount entered in the construction ledger and I took it for a fact.

545

Q135. Well, is that at the rate of \$4500 a mile? A. Yes, it is.

Q136. And the portion constructed for the Attleboro Steam & Electric Company was 4.34 miles? A. Yes.

Q137. And that was charged, that \$19,530? A. Yes, sir.

Q138. And that was also at the rate of \$4500 a mile? A. Yes, sir.

Q139. Now, the sum of those two figures representing the payments received by the Narragansett under the contract rate is \$31,275? A. That is right.

Q140. So the total cost of the line was \$102,-343.90? A. Yes.

Q141. If you deduct the \$31,275 from that you have a balance of \$71,068.90? A. Yes.

Q142. Now, the total mileage of the Seekork Company is 2.61 miles, that of the Attleboro Company is 4.34 miles, making a total of the two combined of 6.95 miles? A. That is right.

Q143. If you deduct that from the total distance—I think you gave the figure 4.61 miles remains?

A. Yes.

Q144. Out of a total of 11.56 miles, deducting the Seekonk Company and Attleboro portion 6.95 you have 4.61 miles? A. That is a fact.

Q145. Now, if you divide the amount of the total remaining by the 4.61 miles you get an item of about \$15,500 a mile, do you not? A. That looks reasonable.

Mr. Graustein: I think he testified that it was 9.6 miles in Rhode Island.

548

The Witness: That was the testimony I started to read from this paper and I realized that it was misleading and stopped, and told you I couldn't give it.

Mr. Chairman Bliss: The figure that he gives us now is 11.56 miles as the total distances, and if you deduct the Massachusetts portion which is charged off at the rate of \$4500 a mile under the contract, we find that the remaining portion of the total there divided by 4.61 leaves about \$15,400 a mile there as the investment cost in East Providence. have brought out from the witness a certain difference in the character of the construction in East Providence, a certain portion being underground, cables and so on. It seems to me the evidence pretty clearly discloses the fact that you could not put that charge in on the Seekonk or the Attleboro end of it because you were bound by the contract and you had to put it somewhere and put it on the Rhode Island end whether it is actually owned or not?

Mr. Graustein: It looks whatever balance there was is in Rhode Island.

A. The cost of the underground, shown by the construction ledger, is \$5561.61 for .32 miles.

Mr. Graustein: Does that include ducts as well as construction? Or only construction?

A. 13,446 feet, dug feet, amount \$1048.79.CQ148. Does it include cables is my question?

I don't know that it is proper to dig out the items-

Mr. Chairman Bliss: Of course, it seems to me-

## A. It does not appear.

Mr. Chairman Bliss: —that the Narragansett has not any right to charge up the investment there when in the investment, and contract with the Seekonk Electric Company and the Attleboro Company, and arbitrarily put that back in Rhode Island although it does not physically exist there.

554

The Witness: The cables are separate items, cables, conductors, devices, are \$6,387.45.

Q149. Covering what distance? A. The same, .3; that makes a total cost of the underground according to these items of \$11,949.06.

Q150. Mr. Dodge: Any reason why the rest of the distance should not have been about the same per mile in Rhode Island as in Massachusetts? A. Well, judging from getting out of the ground in East Providence the first mile and a half ought to be pretty expensive, and after that part run about the same way; it goes on the Attleboro right of way, it ought to be the same thing all the way, they are the same character as in Attleboro.

555

Q151. Does your examination of the books of this company enable you to say what rate they were paying for borrowed money in 1923? A. We saw their note book and their rates of interest paid and we averaged for the earlier years as I remember for

1923, the first part of it—our examination stopped in the middle of the year—was something like 4.9 for the average.

Q152. In those figures as computed in Exhibit 1, upon which the proposed rate is figured, at what rate is interest allowed on the fuel stock on hand? A. Seven per cent.

Q153. What rate is interest charged, say, on the invoices paid by the company in advance? A. Six per cent.

Q154. Is there any credits for discounts? A. None that we could see; excuse—I would like to change that answer. I do not remember any credits for discounts.

Q155. What is the interest charge on construction costs? A. As I remember it, 6 per cent.

CQ156. Mr. Graustein: If you took the average of the cost of their stock at 8 per cent and the average cost of money received on notes at 4.9 per cent, took the weighted average of the two you would find the average cost of their money was far more than 7½ per cent, would you not? A. We didn't do it that way.

CQ157. No; that is what I would like—if you did take the weighted average cost of their money, stock money or note money we would get a figure, one in excess of 7½ per cent? A. Oh! no.

CQ158. Do you know how much stock it had outstanding? A. No.

CQ159. Your figures show; will you look? A. How much capital stock outstanding?

CQ160. Yes; unless you want to admit it, Mr. Dodge.

557

Mr. Dodge: It is obvious, of course.

Mr. Graustein: Then I will withdraw the question. That is all.

Mr. Dodge: I have no further evidence.

Mr. Graustein: Nor have I.

Mr. Graustein: Before Mr. Dodge begins he is agreeable to the introduction of two additional exhibits showing the boiler costs and the turbine costs of the Narragansett Company, that is, the cost for new boilers and new turbines over the periods of years running from 1907 to 1920.

Mr. Dodge: I will agree, if Mr. Gray were called to the stand, he will testify to that effect.

Mr. Chairman Bliss: They will be attached together and marked as "Exhibit 13."

## Arguments of Counsel.

Mr. Dodge: Mr. Chairman, in this very excellent stenographic transcript I noted just two things at the beginning that I wanted to ask to have changed. On page 6, in the fifth line, the word "reels" should be, of course, "rates"; and four lines below that I am very sure that word "consequently" should be "secondly."

One other thing; I am quite sure that at the outset of my argument I mentioned one point which does not appear here and that is the point upon which we have always laid stress, that this is a contract relating to interstate commerce and therefore that the court has no jurisdiction over it. That does not involve changing this record but I simply want to make it plain that I am very sure I said at the beginning, and I repeat now, that we want to reserve our rights upon all those legal questions including the general contention that this Commission has no jurisdiction over interstate rates and that and all the other questions of law which I raised in my opening I say no more now than to repeat that we do, of course, not waive those points.

Mr. Chairman Bliss: I will say that we will have attached a transcript of the arguments of counsel so that all those matters will be a matter of record.

Mr. Dodge: This, may it please the Commission, is a case of very great importance and possessing a high degree of novelty. It can not possibly be argued by me, even although I am generally brief in my arguments, in five minutes. It involves many questions of difficulty of great importance to both

563

They want to get from Attleboro some sides. \$50,000 a year more than they are entitled to under the contract. They want to get it for all the remaining years of the contract. They sweep that aside and ask us to pay now what amounts now to 50 per cent more than we are paying under the contract and it is, of course, a question of very great importance—this proposed new rate 125, and although a general rate for electric companies, in form, is conceded to be the rate that is aimed by this contract with the Attleboro Company, and it is practically conceded by Mr. Gray that it was made general in terms in order to avoid, partially avoid the possibility of legal difficulty-in substance, of course, it is nothing but to avoid the contract with the Attleboro Company. We were the only concern notified of the hearing; the only one required to be notified. There is not any other electric company of the sort that this rate would apply to that takes anywhere near the amount of current that this rate applies to, but only a small fraction of the amount of current, therefore, your Board, of course, will appreciate that this is an attempt to avoid the contract with the Attleboro Company.

Now, I say that the situation is unique. Here was this contract, solicited from us, not sought by us. We were making our own power, our own current there in Attleboro, and content to do it, and these people came over there and after month after month of negotiations and persuasion induced us to make this contract with them—and submitted reports and arguments in writing as to why we should enter into this contract. They did that at

566

a time of most rapidly increasing prices. Every chart in evidence here shows in the early part of 1917 and all through 1917 there was a constant, tremendous rise in prices of everything, all materials in this country and they must be taken to have known that. It can not be assumed that this company did not know what was going on at that time.

We were finally persuaded to enter into this contract, and in good faith entered into it, and it contains a great deal besides the mere rate that is charged to us. It included an agreement on their part to build a transmission line in Rhode Island and stand the cost of that. It included the agreement on our part to pay them at the rate of \$4500 a mile for the line in Attleboro; an agreement with the Seekonk Company in the same amount for the line at Seekonk; an agreement by the Narragansett not to charge any more but to accept that in full. It contained a guaranty-I don't know where this will leave us if the Board permits this contract to be abrogated-it contained a guaranty of the Narragansett Company to the performance and to the Seekonk Company to its obligation under the contract. Now, where are we left if this contract is thrown aside? Are we left with no redress so far as the distribution line of Seekonk is concerned except against that little shell of a company, or not? The contract contains many other provisions. We were persuaded to make it. As a result of it we gave up our generating plant, dismantled it, put it out of business, and are in no shape today to reestablish it.

569

Then they come here because they are not making quite so much money as they think they ought to make on this contract—and I shall point later that it is entirely a question of this 8 per cent. There is not any doubt a pocket loss—this contract. It is a question how much of that 8 per cent they are going to get back which at the present time they are not getting under the contract, I say, when for some reason it does not work to their satisfaction. After we have dismantled our plant they come here and file this new rate.

Now, Mr. Chairman and Gentlemen, they abandoned entirely the question of giving us any preference because we had this contract, to concede to us any rates whatever. They fabricate a new rate which is based upon the maximum of charge that they can possibly make to a new customer without any rights at all against them going beyond, as I think I can point out, what ought to be the maximum to such a customer, resolving every single doubt in favor of themselves and making up this rate on a basis of costs and returns of 8 per cent and everything else, which figures some 50 per cent higher than we are now paying.

Now, the contract was more than an ordinary contract which are often dealt with by commissions and courts. In this case it is a contract which has received the sanction of this Commission by sanctioning a rate for twenty years. Your Honorable Body sanctioned this contract. That is a factor. That is not present certainly in most of the cases in the books which deal with rates. Commissions establish new rates irrespective of contracts. This

572

575

contract came before your Board under a statute which permits discrimiation in proper cases. came under a statute which called upon your Board. or authorizes your Board to approve if you see fit a rate which would otherwise be discriminatory, where the circumstances are different from the charter, and your Board did approve this and set your sanction upon it, and the Attleboro Company was entitled to relief upon the contract. Under the contract we were to stand no loss. That is another valuable factor, that is, the electricity we were to pay for was metered in Attleboro, in our own plant, and not in Providence. We were to pay a return upon the cost of the line which we built in Attleboro. We were to pay a certain sum annually as part of the charges of maintaining the station, staff of labor made necessary by this contract which we should not otherwise have had to incur. All those things are now wiped aside by this new rate. There is substituted a rate to which we are not a party to that bargain, as to which we are not given any opportunity to bargain with them. We are treated exactly as though we were an outsider, a customer to them now for the first time for rates. They figure the rate in these exhibits of theirs in every way so as to give this maximum advantage. They don't make the slightest concession to us because of the fact they persuaded us in this arrangement originally. They resolve every doubt in their own favor and have filed a rate here which they set as a standard and from which they compute losses, and even with this resolve of every doubt in their favor and piling up upon us every charge that they could possibly and their appor-

tioning expenses to us in a way that is unjustifiable, even at that they can barely show a loss that exists. This 8 per cent return-you modify those figures of theirs in the slightest degree and you will find, Mr. Chairman, that what we are fighting about here is the 8 per cent return. They are getting a part of it; they want the rest of it. That is the whole reason why they are throwing over this contract in spite of the fact that, by their letter to your Board at the beginning they state they didn't expect to make 8 per cent during the early years of the contract. Now, the average unit cost was \$45 when the contract was made; and the generating plant, it was \$77.53 in 1918, according to the figures in this last exhibit. That must have been because of conditions which were obvious to every one in 1917. The average unit cost could not have jumped over \$30, more than 66% per cent in one year without giving fair warning of the conditions of prices.

of rising prices. What has happened was to have been foreseen. What has happened in the way of return was foreseen and expressly stated in the letter. They are making now a small percentage of return on this contract, perhaps 2 or 3 per cent, which they told Mr. Fales in 1921 they were making, and they want to get the rest of the 8 per cent. Mr. Gray says if the unit cost had remained \$45 "we would be all right." Mr. Chairman, you asked him that question, If the unit rate had re-

mained \$45 you would not have been here? And he said, No. Now, that is one of the most significant admissions made in this case because, what

The contract was made, as we say, in a period

578

581

does he mean? If the unit cost had remained \$45 they would have been satisfied. Now, if you take these figures of theirs which are submitted here you will find that if the unit rate had remained \$45 they would have made in 1923 only \$21,000 less than they are seeking under this new rate; in other words, what they are now, a rate that was satisfactory would have been satisfactory to them is the rate which, if figured on this new basis, would have amounted to \$30,000 more than we are paying now. I call your attention to that as showing that these new rates are not figured right because they have told you that they would have been satisfied with a rate based on a \$45 investment cost presumably because the rate figure of that cost would have been substantially what they are getting now. But if you adopt this erroneous method of figuring that they give in these exhibits you will find that the \$45 average would be-figured on this basis would cost us \$30,000 more than we are paying now. I call your attention to that because it shows that these things are not figured right. The way I get at that \$21,000 is this: you will recall that some \$12 of the \$19 which they propose to charge us for capital cost is based on what is said to be our proportion of the generating plant capital costs and those costs all come down and are dependent upon an average valuation, in 1923, the average unit cost of about \$90. that average unit cost were only \$45 that \$12 would be \$6. Take off \$6 on 3600 kilowatts \$21,600; so that if this rate should be computed in either respect just as it is here but on a basis

of \$45 unit cost, you would get a rate that is not substantially equivalent to what we are paying here but \$30,000 or thereabouts higher; in other words, that is conclusive proof that this method of figuring is not accurate. It is everything for the Narragansett Company and nothing for Attleboro. It shows also what they are after here is the rest of their profit, and you will recollect they figured in 1923 they didn't quite make expenses, charging everything on this liberal basis, interest, everything else-four thousand odd dollars-that is taking everything 100 per cent for the Narragansett Company it is 150 per cent of what they are entitled to in justice. Though they have given a figure of only a loss of \$4000 I say, as a matter of fact, that loss was not incurred. There was a partial profit upon the contract. Now, the other points of law that I have spoken of, I take it your Board is not going to resolve or decide in my favor, but that you are going to take jurisdiction in this case. You will, however, of course, proceed in the light of the settled principles of law, many of which were declared by Judge Brown in our case, and the most important principle is this that, granting for the moment that your Board has jurisdiction to set aside a contract where conditions require it, you have that jurisdiction only where the public interest makes it necessary that the contract should be set aside. That does not mean that a contract should be set aside in the public interest merely because it does not yield a full measure of 8 per cent profit. That is perfectly clear. What is meant is that if a contract is so unprofitable. so costly to the Narragansett Company that the

584

587

carrying of it out involves a risk, a danger that it will not be able to perform its duties to its other customers properly, that it will not be able to supply them satisfactorily with current at reasonable rates—if that is really endangered then the public interest comes in and justifies your Board, in proper cases, to authorize a rate which violates the contract.

Now, Judge Brown spoke over and over again, in his opinion, on that point and stated the issue in that way. He began by quoting from 295 Federal Reporter at page 1901, by quoting from Judge Southern's opinion in the Supreme Court of the United States where he says that, while a State may exercise its legislative power to regulate public utilities and fix rates notwithstanding the effect may be to break or abrogate proper contracts, there is quite clearly no principle so impossible of application to do so merely to relieve the contracting party from the burdens of the imprudence of undertaking the power to fix rates when exercised first for the public welfare to which private contracts must yield; but it is not the independent legislative function to vary or set aside such contracts however unwise and unprofitable they may The power does not exist per se. It is the intervention of the public interest which justifies, and Judge Brown goes on to say, in his own language, that the recital, or finding the recital in your order, which was under examination by him, that the contract though unprofitable, therefore, discriminatory, is a non sequitur; in other words, you have got to find more than the contract was unprofitable in order to find that it is illegal and

discriminatory. He went on to say, There is nothing in the record to show that the defendant brought to the attention of the Commission any evidence that the company would be unable to perform its full duty to the community whose interest it is the function committee (Commission) to protect.

Again, even if the Commission had received an ex parte statement that a single contract was for the time being unprofitable then it was for them further to establish the fact that the public interest had been injuriously affected.

Now, that is the law, and many of the cases of our brief were cited to Judge Brown at the arguments of this case. I am not going to take time to quote them in full because I think Judge Brown's opinion is important, but in some of the other cases it has been amplified a little more. Here, for example, is an excellent statement in the Wichita Railroad case and Kansas, and this is the only one which I will burden your Board with reading it. For instance, they had performed all the contract in question but it bore so heavily on the Power Company that its general revenues would be depleted to an extent that recoupment would have to be made at the expense of the other customers or would otherwise be reflected adversely in its rates and services to that portion of the public served by the Power Company before the contract could be abrogated by the police power; but if the continuance of the performance of the contract would only \* \* \* then the public interest would not be affected and there would be no action

590

or excuse for the intrusion of the State's police power; in other words, it is not enough for the Narragansett Company to say if we get the rest of our 8 per cent, if we get our full 8 per cent on this contract we would apply it to reducing rates 1/2c a kilowatt on the householders customers. That is not enough; and the absence of such intention is absent entirely here for those householders customers are paying excessive rates; under their improvident contract means that the company is not making money on it, and if it did make money it could apply that money to the benefit to some of its other customers. That is not enough. Under the law you have got to find the company's ability to serve its other customers at reasonable rates and make a little surplus for itself is endangered by the continuance of the contract. Now, here we have Mr. Graustein saying in his opening statement, The question before the Commission is whether the contract rate is a fair rate and, if not, whether the proposed rate is a fair rate? Now, that is a very simple way of stating the question but I submit it is not at all the question before you. That would be the question if there were not any contract in the case at all. But contracts mean something and among other things they mean, as Judge Brown says, they are not to be set aside merely because the rate named in them considered de novo would not be fair, merely because the proposed substitute rate is fair, but only where the public interest, the interest of the other customers in getting their power at reasonable rates is involved, and the company can not have redress merely because it wants to get more profit.

593

Now, here we have a company that is extremely We have shown that its ability to serve its other customers reasonably is in no way affected by this contract. We have shown that it has a surplus for 1923, after paying its 8 per cent dividends, of \$293,000; that its surplus for the first three months of 1924 was \$248,000. Now, they have not applied \$50,000 of the surplus to reduce those poor householders' rate 1/2c a kilowatt; they want to get 50c more from us and they say they will reduce them when they get that and maintain their surplus intact. Now, I call your attention to those figures simply to show that there is not any danger whatever that this company will not be able to perform its full duty in Rhode Island. There is no evidence whatever that any rate now being charged by the Company in Rhode Island is unreasonably high. If there were any such rates it would have been their duty to have shown that. which they have not done. The burden was with them. It does appear that never has there been before this Commission a formal complaint of their rates. The testimony so far is that the rates were They can not assert a public interreasonable. est to warrant your Board in setting aside this contract either to put into their pockets the original dividend or a larger surplus, or to reduce other rates unless those other rates are shown now to be unreasonably high. While this contract has been in effect they have reduced their household rates; they have reduced their rates generally on two separate occasions, I think, in the last three or four years. In their last report, which I put in evidence, you read of the condition of prosperity which shows you how far it is from being a

596

necessity to the people of Rhode Island, that our contract should be abrogated. You read of the tremendous increase in the amount of their business; you read that the increase in their earnings, increase in the number of customers, increase in their capitalization, and great increase in their surplus. Now, that is a situation where the public interest is not affected at all and we, certainly, are not in a position to say that our solemn coatract should be set aside "in order that we may get the full 8 per cent return on this portion of our plant."

599

Now, I want to call the Commission's attention to certain broad features of this system by which they have figured that they are making a loss on our contract. We have conceded that they are not making the full 8 per cent on this contract they did not expect to-but we do strenuously deny that they are making any out of pocket loss on the thing. All they claim to have made, figured as they have, all they claim to have made in 1923 in the way of loss is \$4300, a triffing sum, figuring on their own unfair basis of figuring. You remember they told Mr. Fales in 1921 that they were making 2 to 3 per cent but not the full 8. If you take this last exhibit which was put in, Exhibit 10, on page 5 you will observe the loss year by year as they compute it. I don't know whether prophecy now is going to be any better. seem to have thought it was in 1917; but accept for the moment this prophecy is accurate, you have on page 5 the alleged net loss, and you have on page 12, you have their 8 per cent return corrected to cover the income tax.

Now, I wish you would compare that column M with the loss which they figure they are going to make. You will see that the loss—that is where the shoe pinches even if their figuring in other respects is correct—they are not able to bring their loss for all the years from 1921 up to that column M, page 12. That is the correct return from the income tax because they have made a loss for every year from 1929—from 1925 to 1928 is substantially the same and for the other years they are not very different; in other words, it is the profit that we are concerned about here.

Referring again to Mr. Graustein's opening statement; he admitted that the rates pretty nearly passed the cost of things, gave little or no return. He said at another time, gives little or no return. Now, it was little, a little return that they expected during the first years of the contract. It is only by figuring on an unfair basis that they can make their net losses come as near the total figures of their return as they do in that figure. It is unfair to charge us 36/1000 of the capital stock cost of the generating plant. They were not doing anything of that sort. Under the rate of 1921, which was thought by them to be in force for the period when they sent their bills to usunder that rate they figured our demand as 2000, their capacity as 60,000, although by Exhibit 10 of the year 1921 it is only 33,000. That shows a feature of unfairness in this claim here. their maximum primary load peak, primary load figured year by year; as it actually was taken for the year 1921 you will see the peak primary 35,000 all through 1921. Now, when they sent us bills

602

in 1921 they did not charge us on the basis of the fraction of which the numerator was our demand and the denominator was 35,000, because they knew and must have known that that was not fair. They put the denominator there and a fraction, 60,000, and charged us with about 1/30 of the generating costs because we were using about 1/30 ef their current. It is unfair in 1923 to figure that they have made a loss on our contract by charging us with 36.550 of the capital cost of the generating plant which is the biggest item. Of course, in the \$19 rate that is 1/15 of the cost of maintaining that plant including depreciation-interest, everything else is charged upon us although we are charged only 1/35 of their current. The Atlantic took one-half of their current, paid four times as much as we did, only took seventeen times as much as the current in 1923 as we were taking. We took only 1/35, then the Atlantic or the New England Power Company took 1/2, seventeen times what we did. On this basis the figure would have been charged only four times as much in 1923 towards the expenses of maintenance of this plant. That is not fair. can not strike any tribunal as just that the cost of maintaining that generating plant should be figured on any such basis as that, or that this Attleboro Company taking 1/35 of the current should pay 1/15 part of the cost of maintaining that plant. They took no account at all of the secondary current, which they are selling at a profit and in large quantities.

Now, of this \$19 which they propose to charge us, amounting to \$60,000 or \$70,000 a year, more

605

than half is made up-much more than half is made up of the so-called capital costs attributable to the generating plant, and I say that those are figured on an altogether unfair basis. That charge was at our direction of 55,000, when their own figures put in this morning show they are constantly sending out over 70,000-over 80,000 kilo watts they are sending out at a profit, and they are charging us our proportion of the 55,000. makes no difference that the secondary current lessens the charge for primary current to all customers of business they do; it presumably lessens the charge to other customers. That does not mean that those other people have not got to pay their share of the costs of maintaining this plant. Furthermore, they have charged in here, into this contract, this new proposed rate. They have taken everything to their own full advantage. They have gone far beyond what they are entitled to. They are actually now, as appears this morning, actually now trying in this rate to get back what they lost through building that line in Attleboro for us, and get back out of us a part at least of what they lost in the Seekonk line. But they had contracted with us to build that line for us for \$4500 a mile and we paid for it in full, and now they are charging us in this rate proposed, propose to charge us every year for a return figured so as to amply protect them on every dollar which they put into the line of Attleboro over and above the contract price to us. So too they have charged us up to the maximum limit with interest on these items, interest of 7 per cent on the fuel on hand, interest on their own invoices paid in advance,

608

611

without giving us any credit for any discounts; interest at a rate higher than they have paid themselves.

Now, they do not issue capital stock for any such items as that. If it represented any actual tying up of their current assets it meant that they merely borrowed money temporarily at the bank, and they have charged us more than it cost. In apportioning the overhead expenses they admittedly have not given us any credit from the fact that we are a single wholesale customer and that they have tens of thousands-60,000 or 70,000 customers in all. They have charged us a proportionate part of the overhead based solely on the quantity of current taken by us. That is unfair. All these features. as I say, serve to pad up the amount of the ideal return which they are seeking for here under this contract and the amount on the loss which they figure.

Now treating, Mr. Chairman, any one of those items differently you reduce this alleged loss—treating all of them, as I submit you should reduce that alleged loss very materially. You take off \$4 from the \$19 and that will make a difference of \$15,000 or \$16,000 a year in our favor. Take off \$4 from the \$19 on account of the excessive way, excessive proportion of the capital stock of the generating station and you get a figure that is \$15,000 or \$16,000 less. You take some of these other items into consideration, you reduce that \$19 still further and get a further reduction in this alleged loss, and I think you will be satisfied, upon a careful analysis of these figures, modifying them where they ought to be modified, that this

contract is practically today exactly as it was anticipated that it would work in 1917, namely, that it is yielding them a partial profit but not so much as they think they ought to have. And let me come down again to the fact that they concededly -that if the average generating costs had remained at \$45 they would not be here complaining, because if you proceed then to figure the loss on the contract and figure it properly you would not get any loss. If there were a loss we assume that they would be here even if the unit cost was \$15. ask you to figure that, Mr. Chairman, on the basis of their scheme here because if the \$45 figure would not result in a loss so that they would not be here with the complaint, this method of figuring shown in Exhibits 1 and 10 ought to work out that there was not a loss on this contract. Yet, if you follow that method of figuring, you will find that there would be a loss according to these figures of \$30,-That condemns this method of figuring because there is not any loss at all, ought not to be any loss at all on that basis. They would not be complaining if that were the unit cost. Further, this method of figuring can not be accurate; it can not furnish a basis for your Board setting aside its formal solemn contract and putting the Attleboro Company in a position worse-far worsethan it would have been in if it had never been persuaded to make this contract.

The same reasons that show that they had figured their loss on the present contract improperly are, of course, arguments as to the reasonableness of this new rate. We say, even if we had no contract at all, on the simple question before you,

614

whether this new rate is reasonable, it is not figured on a reasonable basis and cannot be so regarded, but that is not the question.

I repeat again, in conclusion, it is a question whether the public interest is involved in any way. The contract can not be set aside merely because it is unprofitable, much less because, as here, it merely does not yield the full 8 per cent. In any case the terminating of the contract, which was unprofitable, might enable the company to reduce rates somewhere else, but that is of no consequence unless those other rates are unreasonably high. Still less is it of any consequence where, as here, the company has a surplus year by year, and upwards of \$300,000, and is amply able without any reference to our contract to reduce those householders' rates ½c a kilowatt.

Mr. Chairman Bliss: You do not claim the company is carrying an excessive surplus, do you?

Mr. Dodge: I do not. I think their surplus as it is running now is amply sufficient to protect the people of Rhode Island against any danger that this company is not going to make money. In former years I understand that it did not earn perhaps a sufficient surplus, and it is entirely proper that it should continue to earn, as the present surplus \$300,000, from year to year, and add it on. There is no suggestion that any of the rates which it is now charging are unreasonable; no suggestion on my part that those earnings are improper and ought to be reduced, but I do say that when they make a surplus of \$275,000 in a year they can not very well say that we need a few extra thousand dollars from you in order to enable us to reduce

618

our rates to a certain class of our customers. That is the fundamental question in the case-what public interest there is here. The whole thing must be judged, of course, as of the time when they come before you asking you to set aside this contract as there is a public side to these things. Now, we have approved the contract, you have approved it when it was made. It must stand unless a strong case is made out against it, at least, full weight must be given to any contract. All I ask you to do is to change, in the first place, to modify these figures as they should be modified in this method of computation so as to see just what the loss from 8 per cent fairly is. Then, having computed that, see whether there is any public interest, to use Judge Brown's language which justifies you in asking us to pay so much more money per year for our current, having in mind, as Judge Brown said, that the mere fact that the contract is unprofitable does not mean that it is discriminatory or illegal. The mere fact that it is unprofitable is far from establishing the fact that the public interest is injuriously affected. So that after a fair estimate is made of how this contract is working out you must consider, I submit, whether or not that shows that there is a public interest in view of all the other considerations which would justify your Board in setting it aside.

Mr. Graustein: There are in the case two questions outstanding, one as to the old contract and the other the fairness of the new rate, assuming that the old contract has to be set aside. Mr. Dodge talked about the old contract not affecting the welfare of the people of Rhode Island. Now,

620

in the first place, I think the people of Rhode Island have expressed themselves in the public utilities act under which this Commission is now proceeding, which says if a rate is unjustly discriminatory the Commission shall set it aside. The Commission has investigated this contract. If it is not unjustly discriminatory I can not conceive of anything that can be. That is not a matter of argument but it is a matter of arithmetic. You can not have a 20,000,000 generating station and distributing system without having the capital of \$20,000,-000 to build it with and you can not get \$20,000,-000 without paying for hiring that money whether you borrow the money or get it in stock. If you borrow the money you have to pay interest on it; if you get it in stock you have to pay dividends. Now, the people of Rhode Island can not continue to be served efficiently if this company can not earn a return on its investment. In the real sense of the word that is just as much an item of cost as the cost of coal and, I think, it has been admitted by Mr. Dodge and by his client that we are not earning a fair return on our investment. think it is axiomatic if we do not we can not serve the public of Rhode Island as we think they should be served. We would say \$50,000 is \$50,000 a year and if we had it we would be in a position to make that concession to the public. He says it does not affect the welfare. Is it to be assumed the public welfare is not affected at all as long as the public is able to pay the rates that will not only support the general business but Mr. Dodge's clients? It does not seem to me there can be any sense in any reasoning of that sort. Of course, it is true if we

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charged the entire interest of our investment to our other customers that then we could get along with Mr. Dodge's claim; but the whole theory of the act is to see that our charges including interest on our investment are fairly divided between our different customers, and then the next question is we made a mistake in making this contract. Of course, we did. I am not sure whether it is important, but assuming that it is important, all we did is we made a contract at a period when generating cost and cost of electrical equipment began to go up and we assumed they would come down again. It is surely not an abnormal human error to assume what goes up will come down. As a matter of fact, experience justifies that. We thought this rise in prices in 1916 and 1917 was a temporary thing due to the war and the war would sooner or later, shorter we hoped, be over and prices would come down again. A long term contract is normally based on current prices, and this was an abnormal thing which nobody could have foreseen. The thing was prices began to go up and have stabilized themselves on a higher level. That we could not foresee; that we did not foresee; I don't think any one could foresee them. As far as being careless is concerned, the whole contract was submitted to the Commission and you studied it. It was passed on by the Com-That shows we used our best efforts to mission. do business on a sound basis.

627

Mr. Chairman Bliss: The Commission particularly inquired whether you had protected yourself by your ability to render service to the public and whether the operation of this contract would

discriminate against your customers in Rhode Island, and we were assured by information that was at your disposal, that you had protected yourselves fully. It was only under that presentation of the matter that we approved the contract.

Mr. Graustein: That I remember clearly at the hearing. We had no incentive to mislead the Commission because we would be misleading ourselves. It is obvious that we did exercise our judgment the best we could and if we made a mistake in failing to anticipate something which had no precedent in my life, at least, and I assume no precedent in the lifetime of anybody sitting in this room. A business man can not be held to foresee a thing which is so abnormal as to have practically no precedent.

Now, then, as to the hardship on the Attleboro Company. I doubt that is seriously urged. If I felt that was an issue I should have introduced evidence; if I thought now it was an issue I should move to reopen, to show the Attleboro Company had paid dividends, 12 per cent dividends on the basis of the increased rate 101. It is also testified by Mr. Stanwood that the Narragansett is one of the efficient companies of the country. I don't think it can seriously be urged that the Attleboro is suffering in the least if they get electricity at its cost today from an efficient company like the Narragansett. Mr. Dodge has said the rate proposed to charge is not fair; I will come to that in a moment. The question whether the old contract is discriminatory-it seems to me that it must be clear that if the contract does not pay a fair return on the investment, still more if it appears

630

here it pays no return on the investment, it is discriminatory; if that is not discriminatory I can not understand what is discriminatory. The company is earning dividends but it is coming from other customers. If it is not discriminatory to make the other customers pay a return on the investment and let the Attleboro Company get its current without paying a return, I don't know what the word "discriminatory" means. dents are innumerable that such a situation is unsound, is just what the statute is aimed to prohibit. Now, I think that will cover that question.

There is the question of the fairness of the new rate. Mr. Dodge denounces it. We won't meet that criticism; we can not meet general denunciation, we can meet specific criticism.

Mr. Stanwood has made a very voluminous report on the subject in which there is, as far as I remember, only two specific criticisms-I will go over my list to see if there are any more-I mean that are figured in dollars and cents, for, after all, rates are a matter of dollars and cents, and if it is made in full detail and there is a criticism on it that criticism ought to be possible to bring it to light and not deal with it in general terms. There has been one criticism that we have charged in the cost of the transmission line from the substation to Attleboro to the State line some of the costs of 633 the line outside Rhode Island. I think the evidence shows we have done that, and I think that the only way of logically-that is the only logical method of dealing with the problem, whether it results in an unfair charge or not I want to leave to the Commission with the comment that under

the contract the Attleboro Company continues to have electricity transmitted over the Seekonk line. As a matter of fact, it would be fair for the Attleboro Company to pay in some way the full cost, the full charge of that line. It does not, in fact, pay any return on that line under the contract and in this rate in question we get part of that back in that \$70,000; so I rather think those two things are not so, that the Narragansett Company is calling a line in Rhode Island more than it really cost; but on the other hand it is not getting anything for having procured the Seekonk Company to transmit into Massachusetts, nor is the Seekonk getting anything; and putting those together, and on the figures of Mr. Stanwood, and I don't think you will find the result is far off-the Narragansett Company is very willing and anxious to have the fullest investigation on that subject or any other detail of the rate—and if the rate is not right and the Commission does not feel it right they want it changed. They don't want to be unfair to the Attleboro Company, and they have tried to create a right basis of cost and that is similar to their own cost rates.

636

635

I will take up a few other criticisms of the rate, not so much that we insist upon the justice of this rate but because we want to show you we have tried to create a rate that has a fair cost basis. I think that the Attleboro Company, assuming it has a contract—not by giving effect—would not expect anything better than a rate based on cost. It has been urged that we charge 6 per cent for discounted bills; 7 per cent for money invested in coal; 6 per cent for interest during construction.

As I pointed out in cross examination, that is less than our average rate as our stock monney gives us 8 per cent and our cost a little under 5. An exhibit shows the money invested, stock in money is far off exhausting that need of money, so our average cost of money is much above those figures. I think it would be best if finance companies did not borrow money but took their current requirements out of their stock. Surely it can not be an objection if the company adopted a conservative practice. Mr. Dodge has said, gentlemen, that the new rate is unfair because it does not allow a difference between the wholesale and retail business. That, of course, is a misapprehension. big cost in the retail business is in the distribution system, and here it plainly says no part of the distribution system is charged to this service except that which is actually used in this service.

638

There is one other factor about this new rate. Take the worst Mr. Dodge says of it. Suppose it is unfair, it is perfectly open, if this rate went into effect tomorrow it is perfectly open to the Attleboro Company the day after tomorrow to come in here with specific objections to it and ask the Commission to consider this question, and the Commission will be bound to give them a consideration of it.

639

Another thing, a practical question, is if the Attleboro Company wanted to settle with the Narragansett Company on a fair rate we would not have bothered the Commission. I know the two companies and Mr. Dodge could sit down and agree on a fair rate. The real question that brings us here is the fact that the Attleboro Company

wants to stand on its contract; it wants the other customers of the Narragansett Company to furnish for its use, without charge, their share of the \$20,000,000 electric system.

I do not like to leave the impression that we feel the rate is unfair and all these questions about the correctness of the new rate—these are really questions of detail on which we think we can demonstrate our position, and if we can not we would be very glad to be shown where we are wrong and we will change the rate to whatever is right.

One question more; Mr. Dodge referred to the demand of the company's system. He says we should figure the total output of electricity and not the primary demand. I can only say to that, as far as I know the electrical industry throughout the country distinguishes between primary and secondary electricity.

Mr. Dodge: I don't claim you are giving up the maximum. I said some consideration should be given to the secondary current as you did in your bills on the 1921 rate.

Mr. Graustein: I think the figures on the 1921

rate were based on arbitrary figures. The Attleboro Company was not charged on the basis of precise demand. However that may be, the demand is given in detail month by month in this schedule. It was made up on the basis of a primary demand, that is to say, the demand of those customers who had a right to continued service in case of breakdown. The exhibit shows that there actually was a breakdown and the output station during the breakdown was limited to substantially the primary demand. That is an unimportant fact be-

641

cause we know it is a thing which may happen. And this is to be remembered: in the testimony witnesses recited that they had never had their service interrupted; in other words, they have no right to complain because they are being charged for this primary current and they have gotten primary current uninterrupted on the occasion when the entire Narragansett plant was down.

One thing about the rate being unfair, that Mr. Dodge referred to, that is that one charge which is definitely left out, and there is no charge for working capital employed except in that one item of coal and discounted bills, but all other working capital employed there is no specific charge for, and there is no charge at all except so far as the allowance one mill for overhead and contingencies. The company has to buy all kinds of supplies and pay for labor. It has put its money out all the time and it is not paid in advance; it is paid in arrears; and there is no charge, as I say, no direct charge for that and no charge at all except so far as one mill will cover.

Now, the question of public welfare: as I have said, if the company can be forced to render service for no return to one customer there is no reason it can not to another customer. We might have several people besides the Attleboro Company in here and each say their contract was not important enough to wreck the company. It seems to me the question is, it can not be necessary for the company to be ruined; and I think the public welfare is indicated by the fact that Exhibit 10 shows that pro-rating 1924 about \$300,000 already is lost on this contract. If it is not time to stop that loss I

644

don't see why, and where you could not find a situation which called upon the Commission to exercise its powers to abrogate an unjust, unreasonable and discriminatory rate such as this is.

Mr. Chairman Bliss: You attach some value to this contract, don't you? Don't you think the Attleboro Company comes in here with a substantial

standing as a result of that contract?

Mr. Graustein: I do, but I feel the Attleboro

Company should be given the lowest rate we can justify and pay its share of the cost of the service. I think this Commission has before it all the rates which the Narragansett Company has in effect. I think that a comparison of those rates with these of the proposed rate will indicate that the company has made an effort to meet that condition and, as I said, the Narragansett Company is, and always has been, prepared to discuss all the details of the new rate with the Attleboro Company on that basis and if the Commission does not feel that the new rate proposed is fair, why, we want to know that. We have studied it very carefully, we think, and we have gotten a rate which is very close to the actual cost. I should say this rate does not meet in terms the cost. It is made in terms of so many dollars. That is to avoid any technical question as to whether a sliding scale rate might be too indefinite. The old 101 rate, the first question of those terms-and in the hearing in the Federal Court I think it was Mr. Dodge who contended that the rate was illegal because it was too vague, so we put in this rate a specific number of dollars or cents for those figures for the month or year, or any time. We are just as anxious as they are to put them on a fair basis and take into consideration

647

the fact of the existence of the contract in doing that.

Mr. Chairman Bliss: What I am very interested in is the point that this contract was entered into with all the formalities of law required. What is a contract worth if the mere fact that a company does not earn its full return, if the Commission should step in, in a proper proceeding and abrogate the contract?

Mr. Graustein: I take it no contract can stand up if the rates fixed under it become such as the Commission would not be justified in approving, and Mr. Dodge says we must have the public welfare attended to. It seems to me and, I think, there is nothing in the decisions to the contrary, that in a case like this the public welfare is affected if it ever is because I say there is no return at all today. The contract fixes the details of the service and fixes a thousand and one things outside rates, and it is for the Commission always under the praiseworthy power of the Commission to set aside a contract.

Mr. Chairman Bliss: Suppose this contract figured one-half the return of 8 per cent., 4 per cent., would you say this Commission would have authority in this proceeding to order this company to pay the full 8 per cent.?

Mr. Graustein: Undoubtedly, I think the Commission would undoubtedly have that authority; if 4 per cent is so low that it would be its duty to do so, I think the Commission would be justified in taking into consideration pest profits and future profits. In this case we have had losses, and anticipate future losses, but I think it is clear, both from the

650

interstate commerce decisions and decisions in various public utility States, that a contract like any other has got to pay a fair return. I think the Commission is justified in considering the past and the future, if there is a contract, but if it is convinced the contract does not pay a fair return then it is the duty of the utility and Commission to establish a rate which has a fair return.

Mr. Chairman Bliss: What is going to happen in the development of the power system in New England where contracts are involved if they are to be practically at the whim and mercy of the Commission where the generating plant is?

Mr. Graustein: Of course, if the subject comes to

653

be of increasing interstate importance we may see a tribunal analogous to the Interstate Commerce Commission, but I feel sure of this that the tendency would be towards increasing the system and the equality of treatment of all customers. If a contract which gives a 4 per cent rate will stand then the Narragansett Company might be in a position to give half of its customers contracts, and the other half would be paying for two. Plainly it would be the duty of the Commission to abrogate such contracts, and it would be true that one contract would be good when two would be bad. This contract is of sufficient social importance so that the Commission has got to recognize its effect upon the prosperity of the company. Mr. Dodge says the company is prosperous but the company's prosperity is nothing but the amount of money it takes from the consuming public; and I may say this for the Narragansett Company, that it has a very amiable record of ren dering service at fair cost with no promoters'

profits; and if there ever was a case where the savings of a utility is likely to find its way back into the pockets of the public the Narragansett Company is the company where that will happen.

Mr. Chairman Bliss: They do not want to do it at the expense of the rights of customers.

Mr. Graustein: No; any customer who comes to the Narragansett Company to make a contract with it today, or six years ago it is all the same, for electricity at a fixed price, and it is well established that that contract can not stand if it gives him the preference. While it is true, it is a case where contract rates clash with public policy, but that public has been so thoroughly established and it has been so thoroughly established too, that it is superior to the contract when they clash, that there is no doubt about the utility and of the Commission to establish equality notwithstanding the contract, and when the contract is made as to-after the act is past-here is an act which says the Naragansett Company has got to render service on equal terms, and the terms they fix must be fair and must remain fair. Of course, under the interstate commerce law they might send you to jail for operating under a contract like this if it gets to be unfair. I know they are very stringent.

Mr. Chairman Bliss: In this particular case your contract provided for certain things that seemed important to the Attleboro Company at the time you entered into it, for instance, the payment of \$1,750 maintenance of substation, and all those things are eliminated in this new rate.

Mr. Graustein: That, after all, is just a matter of arithmetic. It is not necessary to wipe those

656

out. We could leave untouched everything excepting the rates. It is really immaterial whether we add \$1,750 on the rates or subtract it and leave it as a separate item, but it is really, as I said, a charge that we are dealing with, and we are leaving the obligation to render service and the physical conditions of the service unchanged.

Mr. Chairman Bliss: It would be possible, under your contention, for the company to enter into a contract with a company like the Attleboro Company and make the rate so that it would be apparent to them that within a few years they could show a loss then come before the Commission to set aside all the other burdens of that contract and set up a new one that would pay them a full return. Does not that put the company that is taking the current at a big disadvantage in dealing with you?

Mr. Graustein: No, because the contract is no more binding upon them than it is upon the seller. If the price gets up unduly high the purchaser can come in and can invoke the statute under the public utilities act just as the seller can.

Mr. Dodge: I never saw a case of that kind.

Mr. Graustein: I think that is so, but apart from that, if it could be foreseen by either party that the rate is going to be unduly low—the chances—as business men it should be foreseen by both, and their making the contract very likely would have been given with the intention of getting a special rebate to that customer. It is not likely that these statutes have provided for setting aside of proper contracts. It is deliberately and intentionally done in order to preserve equality of treatment, and the more serious the burden on a proper

660

contract the more important in the ordinary case is it to the public point of view to maintain equality of treatment.

Mr. Chairman Bliss: Are there any cases where companies enter into contracts of this kind where they do not show ordinary care and judgment under the circumstances? The commissions and courts have charged that up against the company entering into the contract and said the loss should be deducted from the capital return of the companies?

Mr. Graustein: There have been a great many cases of this sort. I don't remember a single case that came to that conclusion. There is a case there which Mr. Dodge was quoting where a decision favorable to the utility was sent down because, as I consider the cases, proper proceedings had not been taken by the Commission, just as Judge Brown sent us back here. (Quotes from the decision.) In other words, we had proceeded before under what was, I think and I know, was the very general practice of all commissions to assume that the mere filing of the rate would abrogate a contract. The requirement of a contract is a matter which is very new in the decisions. It would really receive emphasis only in decisions last year, in the Supreme Court of the United States, and one in Virginia or West Virginia. Before that there had only been two scattering decisions and all the other decisions had been in effect that you could not abrogate a contract, and that is the effect of the interstate commerce case. A railroad makes its rates by filing its schedules. \* \* \* I should like to file with the Commission subsequently a request for findings

662

and if the Commission would like it, a brief in regard to these authorities because there are a great many which support the power of the Commission.

Mr. Chairman Bliss: We should be very glad to have them, and very glad to have anything that Mr.

Dodge might desire to file with us.

Mr. Dodge: I disagree with a great many of the propositions of law laid down by Mr. Graustein and, among those things, about the 4 per cent. May I call your attention to that case which I find happens to be in the volume I took out for that purpose? That is the case of Wichita to which I referred, in the Supreme Court, Kansas, 214 Pacific Reporter 797, Pub. Utilities Reports, Annotated

1923-D, page 593.

Mr. Chairman Bliss: With the understanding that counsel will be permitted to file requests for findings, and such authorities as they may desire the matter will be considered closed. We have entered an order suspending the effect of the new rate for two months from the 14th.

### Exhibit No. 1

BASIS FOR SCHEDULE R. I. P. U. C. No. 125.

On the accompanying sheet entitled "Generating Plant" data will be found the following:

- (a) The Book Value of the "Generating Plant". The "Generating Plant" in this case means the present generating station of the Narragansett Company, the coal and oil handling apparatus and equipment located at such generating station, and the land allocated to such property. It does not mean the 66,000 volt sub-station, the 22,000 volt sub-station or land allocated to such sub-stations.
- (b) The Reserve for Depreciation applicable to the "Generating Plant".
- (c) The Depreciated Book Value of the "Generating Plant".
- (d) The Peak Primary Load on the "Generating Plant".
  - (e) The Unit Cost of the "Generating Plant".

The Book Value of the "Generating Plant" contains the book value of the "Generating Plant" as of the first day of each month. The values for the first two months are those shown on our books, plus storehouse and office building land. This land, although used in conjunction with our generating station, was not carried on our books as a part of our "Generating Plant" until March 31st. For March 1st we have added to the value determined as above for February 1st, \$758,000 on account of the new switchhouse; for June 1st, \$125,000 was added to the previous month's value on account of the switchhouse; for December 1st, \$1,050,000 was

669

added to the previous month's value on account of a new boiler house extension. On the first of each month from and including March 1st, \$2,250 was added to the previous month's value. This is estimated to cover the ordinary miscellaneous small additions to our "Generating Plant".

The Reserve for Depreciation is that part of the Reserve for Depreciation carried on our books in respect to the generating and delivery plant which we feel is applicable to the "Generating Plant", the book values of which are set forth in the first column and is arrived at in the following manner:

For the first three months we use such part of the reserve herein mentioned as is equal to the ratio between the total book value of our generating and delivery plant and the book values of our "Generating Plant" as set forth in column 1. The reserve for each succeeding month is established by adding to the reserve for the first day of the preceding month one-twelfth part of 3 percentum of the depreciated value of the "Generating Plant" for the first day of the preceding month.

The Depreciated Book Value of the "Generating Plant" is arrived at by deducting the Reserve for Depreciation contained in the second column from the Book Values of the "Generating Plant" contained in the first column.

The peak primary load is the maximum fifteen minute peak of primary power measured at the East Providence, Admiral Street, Elmwood and Elm Street Sub-Stations as to all electricity which passes through such sub-stations and at the "Generating Plant" as to all electricity which does not pass through such sub-stations. In preparing these

671

figures we have assumed that there will be no increase in the primary load after March 1st until sometime in December, possibly between the 15th and 25th.

The unit cost of the "Generating Plant" is obtained by dividing the depreciated book value of the "Generating Plant" by the peak primary load.

The average unit cost of the "Generating Plant" for the year obtained by dividing the sum of the unit cost for each month by twelve, is \$89.15. Multiplying this figure by 13½%, covering an 8% return, 3% depreciation and 2½% for taxes and insurance not including, however, any Federal or State taxes, equals \$11.81, which divided by 95.5%, to cover losses from the sub-station to the point of delivery at the State Line, equals \$12.37, this sum being that part of the annual investment charge necessary to cover the return, depreciation and taxes herein set forth on the Depreciated Book Value of the "Generating Plant".

Received May 22, 1924 Public Utilities Commission State of Rhode Island

677

### Exhibit No. 1

# "GENERATING PLANT" DATA.

| 1924          | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Peak<br>Primary<br>Load | Unit<br>Cost |
|---------------|--|-----------------------------|---|-------------------------|--------------|
| January 1st   | \$5,699,317.47                           | \$693,401.68                | \$5,005,915.79  | 63,970 KW               | \$78.25      |
| February 1st  | 5,719,572.96                             | 705,265.38                  | 5,014,307.58  | 63,970 "                | 78.39        |
| March 1st     | 6,479,822.96                             | 716,804.05                  | 5,763,018.91  | 64,615 "                | 89.19        |
| April 1st     | 6,482,072.96                             | 731,211.60                  | 5,750,861.36  | 64,615 "                | 89.00        |
| May 1st       | 6,484,322.96                             | 745,588.75                  | 5,738,734.21  | 64,615 "                | 88.81        |
| June 1st      | 6.611.572.96                             | 759,935.59                  | 5.851,637.37  | 64,615 "                | 90.56        |
| July 1st      | 6,613,822.96                             | 774.564.68                  | 5,839,258.28  | 64,615 "                | 90.37        |
| August 1st    | 6,616,072.96                             | 789,162.83                  | 5,826,910.13  | 64,615 "                | 90.18        |
| September 1st | 6,618,322.96                             | 803,730,11                  | 5,814,592.85  | 64,615 "                | 89.99        |
| October 1st   | 6,620,572.96                             | 818,266.59                  | 5.802.306.37  | 64,615 "                | 89.80        |
| November 1st  | 6,622,822,96                             | 832,772.36                  | 5,790,050.60  | 64,615 "                | 89.61        |
| December 1st  | 7,675,072.96                             | 847,247.49                  | 6,827,825.47  | 64,615 "                | 105.67       |

Average Unit Cost \$89.15 \$89.15 times 131/4% equals \$11.81

\$11.81 divided by 95.5% equals \$12.37

Received May 22, 1924
Public Utilities Commission
State of Rhode Island

In ascertaining that part of our annual investment charge having relation to the transformation and transmission of electricity it seems desirable to give particular attention to the investment in transformation and transmission equipment and apparatus necessary or useful in respect to the electricity to be delivered to the Attleboro Steam & Electric Co. The accompanying data, therefore, is in relation to the supply of electricity to such Company.

Electricity for the Attleboro Company is generated at 11,000 volts and transformed from such voltage to 22,000 volts by means of transformers located near the "Generating Plant". Such electricity is then transmitted to the East Providence Sub-Station by means of underground cables, thence by underground cables to a riser approximately 1,670 feet from such sub-station, and from such riser by aerial line to a point on the State Line between Rhode Island and Massachusetts where such aerial line crosses the State Line. From such point on the State Line electricity is transmitted over lines owned by the Seekonk Electric Company and the Attleboro Steam & Electric Company to a location near the generating plant of the Attleboro Company.

Electricity is transformed before transmission to the East Providence Sub-Station by means of 3-5,000 K.V.A. transformers located near the "Generating Plant" and is transmitted to such sub-station by means of five cables which require approximately 60,975 feet of duct. The values of these transformers, cables and ducts are shown on the sheet entitled "Transformation and Transmission Data".

The cost of the aerial line is arrived at by taking the total cost of the line from the sub-station to

680

the vicinity of the Attleboro Company's generating station and deducting therefrom the amounts paid by the Attleboro Steam & Electric Company and the Seekonk Electric Company for that portion of the line lying in their respective territories.

The value of the transformers, cables and ducts is decreased 12.16% to allow for depreciation, such percentage decrease in value being arrived at by dividing the Reserve for Depreciation for January 1st as shown on the sheet entitled "Generating Plant" Data by the Book Value of the "Generating Plant" at the same date.

683

The sub-station values are those shown on our books as of March 1, 1924. For the purpose of the present calculations such values are decreased by the value of the land, building and equipment chargeable to street lighting and further decreased to allow for depreciation by the same percentage used in depreciating the cables, transformers and ducts.

The depreciated value of the transformers, cables and ducts would thus amount to \$150,752.82 and that of the sub-station building, land and equipment minus any portion chargeable to street lighting, \$103,512.53. The estimated load at this substation is 13,000 kilowatts of which 220 kilowatts is chargeable to street lighting. In arriving at the investment per kilowatt in transformers, cables and ducts we have divided the total investment in such property by 13,000. In arriving at the investment per kilowatt in sub-stations land, structure and equipment, we have divided the investment in such property by 12,780. The kilowatt cost of transformers, cables and ducts thus amounts to \$11.60 and of sub-station land, structure and equipment, \$8.10. These amounts multiplied by 131/4% total \$2.61, which divided by 95.5% to cover

drop between the sub-station and the point of delivery equals \$2.73, this sum being that part of the annual investment charge necessary to cover an 8% return, depreciation and taxes not including, however, any Federal or State taxes on the depreciated book value of transformers, cables, ducts and sub-station land, structure and equipment as herein set forth.

The value of the aerial line determined in the manner set forth above is \$73,886.23. This value is depreciated by taking a proportionate part of a reserve covering transmission and distribution lines and other equipment equal to the ratio between \$73,886.23 and the value of such transmission and distribution lines and other equipment. This part of such reserve is equal to \$10,221.84. Deducting this from the book value of the line we obtain a net depreciated value of \$63,664.39, which divided by the Attleboro Company's peak load; namely, 3,840 kilowatts measured at the East Providence Sub-Station, gives a kilowatt cost of This multiplied by 15% to cover an 8% return, depreciation, taxes and maintenance, equals \$2.49 which divided by 95.5% to cover loss between the sub-station and the point of delivery, equals \$2.61, this sum being that part of the annual investment charge necessary to cover such return, depreciation and taxes not including, however, any Federal or State taxes on the depreciated book value of the transmission line from the East Providence Sub-Station to the point of delivery at the State Line, as herein set forth and to provide for the maintenance of such line.

686

687

Received May 22, 1924
Public Utilities Commission
State of Rhode Island

689

## Exhibit No. 1

# TRANSFORMATION AND TRANSMISSION DATA.

| A 3—5,000 K.V.A. Transformers 5—Cables  Duct—60,975 feet @ 50c                                   | X<br>X<br>X | 1621<br>1586<br>1514<br>1586<br>1621<br>2540 | 25,3<br>14,9<br>43,5<br>22,6<br>18,4 | 230.84<br>378.95<br>002.03<br>519.91<br>587.65<br>115.18<br>487.50 |   |
|--|-------------|--|--------------------------------------|--|---|
| l  | С           | Dep.   | \$171,6                              | 522.06<br>869.24   | \$150,752.82 divided by 13,000 equals \$11.60 times 13¼% equals \$1.54  |
| D Sub-Station, East Providence: Land Book Value 3/1/24 Structure, Book Value 3/1/2 Equipment, "" | 24          |  | 93.15<br>87.58<br>47.92              |  | Ÿälla.  |
|  |             | \$134,7                                      | 28.65                                |  |   |
| Less Street Lighting, Land, Buil   | ld-         |  |                                      |  |   |
| ing & Equipment  |             | 16,8   | 86.52                                |  |   |
| De   | ep.         | \$117,8<br>14,3                              | 29.60                                |  | 12.53 divided by 12,780   |
|  |             |  |                                      | equ  | als \$8.10 times 131/4% = 1.07  |
|  |             |  |                                      |  | \$2.61  |
|  |             |  |                                      | \$2.61   | divided by $95.5\% = $2.73$   |
| Estimated Total Load 13,00 Street Lighting Demand 22   |             | .w.  |                                      |  |   |
| 12,78  |             |  |                                      |  |   |
| Attleboro Load 3,84<br>B Transmission Line X1595, N. E.  | 0 K<br>L. ( | .W.<br>Co. sha                               | re only                              | Dep.   | \$73,886.23<br>10,221.84  |
|  |             |  |                                      |  | \$63,664.39 divided by 3,840 KW equals \$16.58 per KW \$16.58 times 15% = \$2.49 \$2.49 divided by 95.5% = \$2.61 |

690

Received May 22, 1924 Public Utilities Commission State of Rhode Island The foregoing data shows the necessity of including in the annual investment charge per kilowatt of demand the following items:

| On account of generating plant<br>On account of transformers, cables and | <b>\$</b> 12.37     |
|--|---------------------|
| sub-stations On account of aerial transmission line                      | $\frac{2.73}{2.61}$ |
|  | \$17.71             |

Of the first two items totalling \$15.10,  $\frac{8}{13.25}$  or \$9.117 is the amount of the 8% return contained in the investment charge per kilowatt of demand.

692

Of the last item; namely, \$2.61,  $\frac{8}{15}$  or \$1.386 is the amount of the 8% return contained in the investment charge per kilowatt of demand. The sum of these two items equals \$10.503. In order that this amount may be left after paying Federal Income Taxes of  $12\frac{1}{2}\%$ , it will be necessary to receive \$1.50 more. This added to the \$17.71 set forth above amounts to \$19.21, which fully justifies the \$19.00 investment charge contained in our Schedule No. 125.

Received May 22, 1924 Public Utilities Commission State of Rhode Island

695

In ascertaining the electricity charge we have computed the cost of generating electricity at our "Generating Plant" and delivering the same to the East Providence, Admiral Street, Elmwood and Elm Street Sub-Stations and dividing the same by the total number of kilowatt hours sent out from the above mentioned sub-stations and from the "Generating Plant" as to such electricity as does not pass through any of the above mentioned sub-stations.

Such unit generating and delivery cost is ascertained for each month and there is added thereto one mill to cover such of the general expenses as should be charged to electricity delivered under this schedule and which have not otherwise been given consideration in the schedule as well as to provide for contingencies. The total unit generating and delivery cost thus obtained is multiplied by the number of kilowatt hours delivered to the Attleboro Company each month to obtain the total generating and delivery cost each month of the electricity delivered to the Attleboro Company. The total cost for the twelve months is then divided by the total number of kilowatt hours delivered to the Attleboro Company during the year. These figures are for the calendar year 1923. The generating and delivery cost includes the following:

696 Labor

Generating Station Superintendence
Boiler Room, Turbine Room, Electrical &
Miscellaneous Labor
Superintendence & Labor at the Admiral Street,
East Providence and Elmwood Sub-Station

Superintendence and Labor on lines between the Generating Station and above mentioned sub-stations

### Fuel

Handling & Storage Charges on Fuel Interest on Fuel Stock Insurance on Fuel Fuel Losses Ash Handling Water Lubricants

Supplies & Miscellaneous Expenses at the Generating Station, Admiral Street, Elmwood & East Providence Sub-Stations and for Transmission Lines

Maintenance, Repairs at the Generating Plant and each of the above mentioned sub-stations. Maintenance & Repairs of Transmission Facil-

ities between the Generating Plant and the various sub-stations herein enumerated

Miscellaneous Storehouse Expense Purchasing Expense

Accounting Department Expense

Automobile Expense Liability Insurance

Interest on Invoices paid in advance

Current and Electricity Purchased

Received
May 22, 1924
Public Utilities Commission
State of Rhode Island

398

The generating and delivery cost of the electricity delivered to the Attleboro Company for the year 1923 ascertained as above set forth is \$.0075348. This divided by 98% to cover the losses between the East Providence Sub-Station and the point of delivery at the State Line gives us a net cost of electricity at such point of delivery of \$.0076886.

It is estimated that fuel during 1924 will cost 7 cents more per barrel than during 1923. This, on the basis of 292 kilowatt hours per barrel of fuel at our generating station, would mean an increase per kilowatt hour at such generating station of \$.00024, which divided by 95% to cover losses between the generating station and the point of delivery at the State Line, gives us an increase per kilowatt hour of \$.00025 due to increased cost of fuel. This added to the unit cost above set forth, gives a total unit cost at the State Line of \$.0079386.

Received
May 22, 1924
Public Utilities Commission
State of Rhode Island

# GENERATING AND DELIVERY COST

|           | K.W.H.     | Unit     | Total       |     |
|-----------|------------|----------|-------------|-----|
| 1923      | Delivered  | Price    | Cost        |     |
| January   | 934,200    | .0070293 | \$6,566.77  |     |
| February  | 829,100    | .0069171 | 5,734.97    |     |
| March     | 872,500    | .0072709 | 6,343.86    |     |
| April     | 794,400    | .0083663 | 6,646.19    |     |
| May       | 795,800    | .0083186 | 6,619.94    |     |
| June      | 733,800    | .0073047 | 5,360.19    |     |
| July      | 704,100    | .0071113 | 5,007.07    |     |
| August    | 758,500    | .0070595 | 5,354.63    |     |
| September | 783,100    | .0074808 | 5,858.21    |     |
| October   | 979,500    | .0075158 | 7,361.73    |     |
| November  | 930,500    | .0075019 | 6,980.52    |     |
| December  | 1,056,100  | .008339  | 8,806.82    | 704 |
|           | 10,171,600 |          | \$76,640.90 |     |

\$76,640.90 divided by 10,171,600 equals \$.0075348 \$.0075348 divided by 98% equals \$.0076886 Increase due to fuel \$.00024 at Generating Station \$2.00024 divided by 95% equals \$.00025 increase at point of delivery

> \$.0076886 .00025

\$.0079386

Received
May 22, 1924
Public Utilities Commission
State of Rhode Island

#### Exhibit No. 1

The sheet entitled "Details of General Expense for 1923" contains the several accounts of our general expense for 1923. Those items which do not enter into the computations upon which this schedule is based, except through the one mill per kilowatt hour addition to the generating and delivery cost, are designated by an asterisk.

Received
May 22, 1924
Public Utilities Commission
State of Rhode Island

## DETAILS OF GENERAL EXPENSE FOR 1923.

|   | Cost<br>Por KV<br>This Year Th | in Mills<br>VH Sold |     |  |
|---|--------------------------------|---------------------|-----|--|
| *Salaries of General Officers                       | \$59,493.63                    | .181                |     |  |
| *Directors' Fees                                    | 4,560.00                       | .014                |     |  |
| Salaries, Acctg. Dept. & Gen. Of-                   |                                |                     |     |  |
| ficers' Clks.                                       | 25,706.57                      | .078                |     |  |
| *Stationery & Printing                              | 5,665.48                       | .017                |     |  |
| *Postage  | 2,421.07                       | .007                |     |  |
| *Telephones & Telegrams                             | 2,055,42                       | .006                |     |  |
| *Rent   | 6,787.30                       | .021                |     |  |
| *Sundry Expense in General Offic                    |                                | .012                |     |  |
| *Miscellaneous General Expense                      | 54,528.60                      | .166                |     |  |
| *Law Expense—General                                | 8,384.49                       | .025                |     |  |
| Insurance—Liability                                 | 11,831.15                      | .036                | 710 |  |
| Insurance—Fire                                      | 8,729.22                       | .027                |     |  |
| *Insurance—Use & Occupancy                          | 1,351.26                       | .004                |     |  |
| *Insurance—Fidelity                                 | 208.93                         | .001                |     |  |
| *Taxes—Franchise                                    | 15,128.66                      | .046                |     |  |
| Taxes-Income, Federal                               | 243,208.00                     | .739                |     |  |
| *Taxes—State  | 47,322.76                      | .144                |     |  |
| Taxes—Town & City                                   | 189,643.79                     | .577                |     |  |
| *Taxes—Federal Capital Stock                        | 20,721.50                      | .063                |     |  |
| Duplicate Electric Charges                          | 13,024.15                      | .040                |     |  |
| *Property Damage                                    | 909.78                         | .003                |     |  |
| Purchasing Dept., Salaries and                      |                                |                     |     |  |
| Expense   | 11,236.15                      | .034                |     |  |
| Storehouse Salaries & Expense                       | 57,715.25                      | .175                |     |  |
| *Repairs, Bldgs., Shop, Store-                      |                                |                     |     |  |
| house & Garage                                      | 3,465.52                       | .011                |     |  |
| *Labor & Expense, Heating Plan                      | at 9,980.67                    | .030                |     |  |
| Automobile Expense                                  | 43,102.73                      | .131                | 711 |  |
| *Uncollectible Accounts                             | 10,127.15                      | .031                |     |  |
| *Donations & Charities                              | 1,575.00                       | .005                |     |  |
| *Welfare Work                                       | 22,036.13                      | .067                |     |  |
| *Sick, Injured and Pensioned Em-                    | ,                              |                     |     |  |
| ployees   | 1,387.98                       | .004                |     |  |
| *General Advertising                                | 3,639.38                       | .011                |     |  |
| Total General Expense<br>Electricity Sold in K.W.H. | \$863,734.31<br>328,889,955    |                     |     |  |
| Total •Items  | <b>\$</b> 285,585.60           |                     |     |  |
| Total Other Items                                   | 591,172.86                     | 1.797               |     |  |
|   | 100 31 I                       | ***                 |     |  |

In above totals the credit item "Duplicate Electric Charges" is disregarded.

714

### Copy

[Attached to Exhibit No. V.]

May 21, 1924.

Attleboro Steam & Electric Co., 60 Congress Street, Boston, Mass.

#### Gentlemen:

We have received your letter of May 8th in which
you state that your Attorney, Mr. Dodge, is of the
opinion that you should not furnish us certain details of Mr. Stanwood's report to you, which we
previously requested. We regret exceedingly that
he has taken this position.

This report has to do entirely with figures obtained from our books and records by Mr. Stanwood. The details which we desired had relation only to certain calculations and assumptions made by Mr. Stanwood. We have felt all along that to approach this matter openly would be to our mutual benefit and to this end have given your Company and its Agents full access to our books and records. We intend to continue this policy and are, therefore, mailing you, herewith, copy of our letter of today to the Public Utilities Commission containing detailed data upon which our schedule R. I. P. U. C. No. 125 is based.

We desire further to state that our records and books of accounts are open to you at any time. We would respectfully suggest that you have your auditors check the enclosed data and obtain any additional information which you may desire from our books and records as soon as convenient, so that the proceedings before the Public Utilities Commission may not be unduly delayed.

Very truly yours,

NARRAGANSETT ELECTRIC LIGHTING Co. Asst. Secretary.

JEG/K Enc.

(Stamped)
Received
May 22, 1924
Public Utilities Commission
State of Rhode Island

### Exhibit No. 2

May 29, 1924.

Public Utilities Commission, State House, Providence, R. I.

### Dear Sirs:

We are sending you, herewith, calculations showing the cost of supplying the Attleboro Company with electricity for the years 1923 and 1924: also the net receipts under Schedule No. 68 for both years. Where actual figures were not available estimates have been used.

719

These figures show that Schedule No. 68 would produce in 1923 \$45,611.33 and in 1924 \$50,918.37 less than the cost of supplying the Attleboro Company with electricity.

Very truly yours,

JESSE E. GRAY, Asst. Secretary.

JEG/K Encs.

Received
May 31, 1924
Public Utilities Commission
State of Rhode Island

# Exhibit No. 2

721

May 29, 1924

Attleboro Steam & Electric Company 60 Congress Street Boston, Mass.

#### Gentlemen:

Please find enclosed, herewith, copy of letter this day mailed to the Public Utilities Commission of Rhode Island, together with the enclosure mentioned therein.

Very truly yours,

Assistant Secretary 722

JEG/K Enclosures

## RESULT OF SELLING ELECTRICITY UNDER SCHEDULE No. 68

During the year 1923, 10,171,600 kilowatt hours were delivered to the Attleboro Company as méasured by meters located at our East Providence Sub-Station. Allowing for a 7% loss between these meters and the meters located at the Attleboro Company's plant would indicate meter readings at the latter location of 9,459,598 kilowatt hours. Under Schedule No. 68 the price per kilowatt hour as measured by such meters is \$.00857 plus or minus \$.000085 for each 10 cent increase or decrease in the price of coal above or below \$3.50 per gross ton. We estimate that coal under contract would have cost \$6.30 a ton alongside our station for the calendar year 1923 which means an addition to the base price of \$.00238 per kilowatt hour and a billing price of \$.01095 per kilowatt hour. The total charge for electricity delivered during 1923 at this price amounts to \$103,582.60.

Under the provisions of our contract with the Attleboro Company the Narragansett Company pays annually to the Attleboro Company \$1,750.00 in respect to sub-station operation; \$2,929.50 in respect to a transmission line and to the Seekonk Electric Company \$1,761.75 in respect to a transmission line. The total of these items, \$6,441.25, should be deducted from the total charge for electricity delivered during 1923, in order to obtain the net amount retained by the Narragansett Company for such electricity. The amount thus determined is \$97,141.35.

The average unit generating and delivery cost to the Narragansett Company of this electricity is

725

shown by the figures which we submitted to you on May 21st and amounts to \$.0075348 per kilowatt hour. This cost multiplied by the number of kilowatt hours delivered as measured at the East Providence Sub-Station gives a total cost of \$76,640.90. Deducting this amount from the net receipts leaves \$20,500.45 to cover all costs other than generating and delivery cost.

The average depreciated unit cost of our "Generating Plant" for 1923 was ascertained in the same manner as were our figures for 1924 which accompanied our letter to you of May 21st (using actual costs, however, in place of estimated costs) and amounted to \$88.81 per kilowatt. The details of these costs are shown on the accompanying schedule entitled "Generating Plant' Data for 1923".

728

Annually in the month of December we determine the load on each of the feeders leading from In 1922 while making our several sub-stations. such determination on December 20th from 4:15 to 4:30 P. M. we observed the Attleboro Company's load to be 3,600 K. W. at the East Providence Sub-Station. This would be the peak load which would be used in our calculations and would hold until a higher peak load was found. Multiplying the unit cost of the "Generating Plant", \$88.81, by the peak primary load, 3,600 K. W., gives us \$319,716.00 as the value of that part of the "Generating Plant" properly chargeable to the generation of electricity for the Attleboro Company. Depreciation, taxes and insurance at 51/4% on the above amount equals \$16,785.09.

729

The depreciated unit cost of the cables, transformers and ducts used in conjunction with the East Providence Sub-Station is \$11.82. The depreciated

unit cost of the East Providence Sub-Station minus street lighting is \$7.03. The sum of these unit costs amounts to \$18.85. To obtain the cost of that part of the above mentioned cables, transformers, ducts and sub-station which should be properly allocated to the supplying of electricity to the Attleboro Company we have multiplied the depreciated unit cost of \$18.85 by 3,600, the Attleboro Company's peak load. The cost thus obtained amounts to \$67,860.00 which multiplied by 5½% to cover depreciation, taxes and insurance makes \$3,562.65.

The depreciated value of the transmission line from the East Providence Sub-Station to the State Line is \$63,981.96 which is all chargeable to the supplying of electricity to the Attleboro Company. Multiplying this amount by 7% to cover maintenance, depreciation and taxes equals \$4,478.74. The total of these last three items, \$16,785.09, \$3,562.65 and \$4,478.74 is \$24,826.48. If we deduct from this amount \$20,500.45, such amount being the net receipts over and above the generating and delivery cost of electricity, we show a loss of \$4,326.03 before giving any consideration to return.

Using the 1923 load factor for 1924 with a peak of 3,840 K. W. the kilowatt hours delivered to the Attleboro Company as measured at East Providence for the year 1924 would be 10,800,000. Allowing a 7% loss between the East Providence Sub-Station and the metering point at Attleboro would indicate that 10,044,000 kilowatt hours would be measured by the meters at Attleboro. Using the same coal cost as was used in the calculation for 1923, this electricity would be sold to the Attleboro Company at \$109,981.80. The payments to the At-

731

tleboro Company and the Seekonk Company in respect to the sub-station and transmission lines would be the same amount as those made during the previous year; namely, \$6,441.25. Deducting this amount from the above mentioned \$109,981.80 would make the net receipts of the Narragansett Company on account of the electricity delivered to the Attleboro Company \$103,540.55.

The average unit generating and delivery cost to the Narragansett Company of this electricity is shown by the figures which we submitted to you in May and amounts to \$.0079386 per kilowatt hour. This cost multiplied by the number of kilowatt hours delivered as measured at the East Providence Sub-Station gives a total cost of \$84,021.84. Deducting this amount from the net receipts leaves \$19,518.71 to cover all costs other than generating and delivery costs.

The average depreciated unit cost of the "Generating Plant" for 1924 was \$89.15 as shown in detail by figures recently submitted to you. This cost multiplied by 3,840, the peak primary load of the Attleboro Company as ascertained by curve drawing demand meter at the East Providence Sub-Station, gives us \$342,336.00 as the value of that part of the "Generating Plant" properly chargeable to the generation of electricity for the Attleboro Company. Depreciation, taxes and insurance at 5½% on the above amount equals \$17,972.64.

The depreciated unit cost of the cables, transformers and ducts used in conjunction with the East Providence Sub-Station is \$11.60. The depreciated unit cost of the East Providence Sub-Station minus street lighting is \$8.10. The sum of these unit costs

734

amounts to \$19.70. To obtain the cost of that part of the above mentioned cables, transformers, ducts and sub-station which should properly be allocated to the supplying of electricity to the Attleboro Company we have multiplied the depreciated unit cost of \$19.70 by 3,840, the Attleboro Company's peak load. The cost thus obtained amounts to \$75,648.00 which multiplied by 5½% to cover depreciation, taxes and insurance makes \$3,971.52.

The depreciated value of the transmission line from the East Providence Sub-Station to the State Line is \$63,664.39 which is all chargeable to the supplying of electricity to the Attleboro Company. Multiplying this amount by 7% to cover maintenance, depreciation and taxes equals \$4,456.50. The total of these last three items, \$17,972.64, \$3,971.52 and \$4,456.50 is \$26,400.66. If we deduct from this amount \$19,518.71, such amount being the net receipts over and above the generating and delivery cost of electricity, we show a loss of \$6,881.95 before giving any consideration to return.

In the above figures which show a loss under Schedule No. 68 for 1923 of \$4,326.03 and for 1924 of \$6,881.95 the cost of capital was omitted. Correcting the above figures to allow for such cost (see note) by adding thereto the cost of capital as shown on the accompanying sheet entitled "Depreciated Value of Property Allocated to the Attleboro Company" shows that under Schedule No. 68 the receipts for 1923 will be \$45,611.33 and for 1924, \$50,918.37 less than the cost of manufacturing and delivering electricity to the Attleboro Company.

In the foregoing calculations in order to determine the losses as above to the Narragansett Com-

737

pany for the years 1923 and 1924 under Schedule No. 68 it has been necessary to estimate what the cost of coal would have been during both of these years had the Narragansett Company been purchasing coal under contract. For this purpose we have estimated the cost to be \$6.30 per gross ton along-side our dock. Should we have been able to purchase coal under contract at a lower figure than herein used, the loss under this schedule would have been greater than those shown herein.

### Exhibit No. 2

#### "GENERATING PLANT" DATA

| Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation   | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant"   | Peak<br>Primary<br>Load  | Unit<br>Cost  |
|--|---|---|--|---|
| \$5,487,949.73                           | \$572,078.24  | \$4,915,871.49  | 55,000 KW  | \$89.38   |
| 5,497,975.30                             | 584,520.70  | 4,913,454.60  | 33,000   | 89.34   |
| 5,501,592,72                             | 596,873.46  | 4,904,719.26  | 33,000   | 89.18   |
| 5,583,826,27                             | 610,384.24  | 4,973,442.03  | 33,300   | 89.94   |
| 5,598,459,98                             | 623,108.55  | 4,975,351.43  | 55,300 "   | 89.97   |
|  | 609,430.49  | 4,998,360.33  | 55,300 "   | 90.39   |
|  | 622,328,47  | 5,004,962.65  | 55,300 "   | 90.51   |
|  | 637,931.04  | 4,991,421.16  | 55,300 "   | 90.26   |
|  | 646.501.91  | 4,979,587.23  | 55,300 "   | 90.05   |
|  | 659,084,69  | 4,964,965.58  | 55,300 "   | 89.78   |
|  |   | 4,955,082,28  | 55,300 "   | 89.60   |
| 5,628,876.60                             | 682,790.30  | 4,946,086.30  | 63,970 "   | 77.32   |
|  | of "Generating Plant"<br>\$5,487,949,73<br>5,497,975.30<br>5,501,592.72<br>5,583,826.27<br>5,598,459,98<br>5,607,790.82<br>5,627,291.12<br>5,629,352.20<br>5,626,089.14<br>5,624,050.27<br>5,626,123.95 | of "Generating Plant" Depreciation \$5,487,949.73 \$572,078.24 \$4,949,7975.30 \$584,520.70 \$560,873.46 \$610,384.24 \$5,598,459.98 \$623,108.55 \$607,790.82 \$609,430.49 \$5,627,291.12 \$622,328.47 \$5,629,352.20 \$637,931.04 \$645,501.91 \$5,624,050.27 \$659,084.69 \$671,041.67 | Book Value of "Generating Plant" St,487,949.73 \$72,078.24 \$4,915,871.49 \$5,501,592.72 \$56,873.46 \$4,904,719.26 \$5,583,826.27 \$610,384.24 \$4,973,442.03 \$5,607,790.82 \$69,430.49 \$4,998,360.33 \$6,627,291.12 \$622,328.47 \$5,626,089.14 \$646,501.91 \$4,979,587.23 \$5,626,123.95 \$671,041.67 \$4,955,082.28 | Book Value of "Generating Plant"  \$5,487,949,73 \$572,078.24 \$4,915,871.49 \$5,000 \$\$5,497,975.30 \$584,520.70 \$4,913,454.60 \$55,000 \$\$5,501,592.72 \$596,873.46 \$4,904,719.26 \$55,000 \$\$5,598,459.98 \$623,108.55 \$4,975,351.43 \$55,300 \$\$5,607,790.82 \$609,430.49 \$4,998,360.33 \$55,300 \$\$5,627,291.12 \$622,328.47 \$5,004,62.65 \$55,300 \$\$5,626,089.14 \$646,501.91 \$4,979,587.23 \$55,300 \$\$5,624,050.27 \$659,084.69 \$4,964,655.58 \$55,300 \$\$5,624,050.27 \$659,084.69 \$4,955,082.28 \$55,300 \$\$\$\$626,123.95 \$671,041.67 \$4,955,082.28 \$55,300 \$\$\$\$\$\$\$\$55,300 \$\$\$\$\$\$626,123.95 \$671,041.67 \$4,955,082.28 \$55,300 \$ |

Average Unit Cost \$88.81 \$88.81 times 13½% equals \$11.77 \$11.77 divided by 95.5% equals \$12.32

# DEPRECIATED VALUE OF PROPERTY AL-LOCATED TO THE ATTLEBORO COMPANY

|   | 1923                | 1924                |
|---|---------------------|---------------------|
| Generating Plant  | \$319,716.00        | \$342,336.00        |
| Cables, Transformers &<br>Ducts<br>East Providence Sub- | 42,552.00           | 44,544.00           |
| Station   | 25,508.00           | 31,104.00           |
| Transmission Line                                       | 63,981.96           | 63,664.39           |
|   | \$451,557.96<br>.08 | \$481,648.39<br>.08 |
| Net Return  | \$36,124.63         | \$38,531.87         |

746

Dividing the above net return by 871/2% to allow for 121/2% income tax gives us the cost of capital, which for 1923 equals \$41,285.30 and for 1924 equals \$44,036.42.

#### Exhibit No. 2

### TRANSFORMATION AND TRANSMISSION DATA

| 3-5,000 K.V.A. Transformers | X 1621 | \$16,230.84  |
|-----------------------------|--------|--------------|
| ,                           | X 1586 | 25,378.95    |
| 5—Cables                    | X 1514 | 14,902.03    |
|                             | X 1586 | 43,519.91    |
|                             | X 1621 | 22,687.65    |
|                             | X 2540 | 18,415.18    |
| Duct-60,975 feet @ 50c      |        | 30,487.50    |
|                             |        | \$171,622.06 |
|                             |        | 45 000 50    |

Less Depreciation

17,902.59

\$153,719.47 divided by 13,000 equals \$11.82 times 749 131/4 % equals \$1.57

Sub-Station, East Providence

| Land, 1/1/23      | \$1,793.15 |
|-------------------|------------|
| Structure, 1/1/23 | 25,757.05  |
| Equipment, 1/1/23 | 89,657.24  |
|                   |            |

\$117,207.44

16,842.13 Less Street Lighting

\$100,365.31

10,459.94 Less Depreciation

\$89,905.37

\$89,905.37 divided by 12,780 equals \$7.03 times 15% = 105

1.57

1.05

2.62 times 95.5% equals \$2.74

\$73,886.23 Transmission Line Less Depreciation 9,904.27

\$63,981.96 divided by 3,-

600 K.W. = \$17.77 per K.W. \$16.58 times 15% = \$2.67

\$2.67 divided by 95.5% = \$2.80

(Copy)

R. I. P. U. C. No. 125

Cancelling R. I. P. U. C. Nos. 68 & 101

# NARRAGANSETT ELECTRIC LIGHTING COMPANY

ELECTRIC LIGHTING CO. RATE N

#### CHARACTER OF SERVICE

Electricity will be supplied under this rate to Electric Lighting Companies for use by them or for sale to their customers. Such electricity will be delivered in the form of 3 phase, 60 cycle, alternating current at the voltage at which it is transmitted to the point of delivery, which point of delivery shall be such location as may be mutually agreed upon provided, however, that in all cases where the customer is located without the State of Rhole Island. such location shall be at the Rhode Island State Line. Meters for registering the current delivered and for the determination of the maximum taking shall be located at the point of delivery, unless some other location may be mutually agreed to, in which case the necessary adjustment shall be made in the meter readings to ascertain the current delivered and the maximum taking as of the point of delivery.

752

753

RATE

Demand in Kilowatts

Name of Charge per Kilowatt of Charge Per Kilowatt Hour

3,000 or over \$19.00 8 mills

TERM OF CONTRACT

One year or over.

#### BILLS

Bills shall be rendered monthly for one-twelfth part of the annual investment charge and for electricity delivered during the previous month and shall be due and payable within fifteen days of rendition.

STANDARD CONTRACT RIDERS AND TERMS AND CON-DITIONS.

755

The Company's Standard Contract Riders and Terms and Conditions on file from time to time with the Public Utilities Commission, where not inconsistent herewith or otherwise mutually agreed, are made a part hereof.

> Effective on all electricity delivered after 12 o'clock midnight June 14, 1924.

May 14th, 1917.

Public Utilities Commission, Providence, R. I.

Attention William C. Bliss, Esq., Chairman.

#### Dear Sirs:

We are handing you herewith, R. I. P. U. C. No. 68, covering special rate for electricity to be sold to the Attleboro Steam & Electric Company at the State Line between Rhode Island and Massachusetts.

This contract is made for a period of twenty (20) years and covers the purchase of all electricity required by the Attleboro Steam & Electric Company for its own uses and for sale in the City of Attleboro and adjacent territory.

As the Narragansett Electric Lighting Company does not have rights to build and maintain transmission lines in the State of Massachusetts, it is necessary that lines be furnished by Massachusetts corporations. Therefore, the contract covers the furnishing of a line in the Town of Seekonk, Massachusetts, by the Seekonk Electric Company, and in the City of Attleboro by the Attleboro Steam & Electric Company. Under the terms of the contract the Narragansett Electric Lighting Company pays to the Attleboro Steam & Electric Company fifteen per cent. (15%) of the original cost of said transmission line, and the Attleboro Steam & Electric Company repairs and maintains the same in proper condition to transmit the current contracted for. The Narragansett Electric Lighting Company pays

758

to the Seekonk Electric Company fifteen per cent. (15%) upon the original cost of the transmission line, plus any sums expended thereon in the future, which would be considered by the Massachusetts Board of Gas & Electric Light Commissioners as assets to capitalize. These sums would not include repairs and maintenance on the line.

The Attleboro Steam & Electric Company is to furnish at its own expense the necessary transformers, switching arrangements, etc., to properly receive the current contracted for, and the Narragan-sett Electric Lighting Company is to pay annually to the Attleboro Steam & Electric Company \$1,750.00 for the operation of the receiving sub-station by the Attleboro Company.

Under the provisions of the contract the price of 8.57 mills per KWH is subject to increase or decrease for fluctuations in the cost of coal to the Narragansett Electric Lighting Company above or below \$3.50 per long ton delivered alongside its generating station.

The contract also provides for decrease of the above-mentioned price of 8.57 mills per KWH to cover discoveries, inventions or improvements which materially decrease the cost of producing or transmitting said electricity and further provides for increase or decrease in the price of current to cover any increase or decrease in the cost of generating or transmitting the current caused by any new increased or decreased taxes, imposts, etc.

In obtaining the price specified in the contract, we have figured on the purchase of electricity by the Attleboro Steam & Electric Company for the full period of twenty (20) years covered by the con-

762

tract and have assumed that the current consumption would increase from approximately 4,500,000 KWH during the first year of the contract to approximately 20,000,000 KWH during the last year of the contract. This would make the total sale of current during the twenty years approximately 205,000,000 KWH. The fixed charges on the generating and transmission equipment have been figured for the entire period of the contract and pro-rated for each KWH. In this way the profit from this particular current is somewhat lower during the earlier years of the contract and somewhat higher during the later years than the average profit which we believe we are entitled to.

764

We feel that the addition of this load to our generating station will decrease the cost of all current generated and in this way our customers in Rhode Island will receive the benefit of this contract.

We, therefore, respectfully request that you waive the usual statutory notice and allow this contract to go into effect at once.

Yours very truly,

ARTHUR D. LISLE, General Manager.

(Stamped)
Received May 17, 1917
In Regular Session Public Utilities Commission
Order No. 335
John W. Rowe, Secy.

#### Exhibit No. 5

AGREEMENT made this eighth day of May, A. D. 1917, by and between the Narragansett Electric Lighting Company, a Rhode Island corporation (hereinafter called the "Naragansett Company") party of the first part, and Attleboro Steam & Electric Company, a Massachusetts corporation (hereinafter called the "Attleboro Company") party of the second part, and Seekonk Electric Company, a Massachusetts corporation (hereinafter called the "Seekonk Company") party of the third part:

767

#### WITNESSETH:

Whereas the Attleboro Company desires to purchase electrical energy for sale in the City of Attleboro, Commonwealth of Massachusetts, and any adjacent territories; and

WHEREAS the Narragansett Company desires to furnish such electrical energy to the Attleboro Company,

Now, THEREFORE, the parties hereto in consideration of the premises and of One Dollar by each to each of the others paid, the receipt of which is hereby acknowledged, and of the mutual covenants and agreements hereinafter set forth, hereby covenant and agree with each other as follows:

768

#### ARTICLE I.

For and during the term of twenty years from the date of the first delivery of electrical energy

hereunder, and during any further continuance of this contract, the Narragansett Company shall sell and deliver to the Attleboro Company, and the Attleboro Company shall purchase and take from the Narragansett Company, all the electrical energy now or at any time hereafter used by it and supplied to its customers in the City of Attleboro and any adjacent territories, the amount now required, being approximately four million kilowatt hours per year, in accordance with and subject to the terms and provisions hereinafter set forth, but it is expressly understood and agreed that the first delivery of the electrical energy hereunder shall be made not later than January 1, 1918. The electrical energy to be delivered or furnished by the Narragansett Company shall be in the form of three phase alternating current having a frequency of approximately 60 cycles and a pressure of approximately 22,000 volts and such frequency shall not vary more than two per centum (2%) above or below said sixty cycles per second, and such voltage shall not vary more than five per centum (5%) above or below said 22,000 volts, except by reason of accident or any cause or condition beyond the reasonable control of the Narragansett Company. The Narragansett Company may supply such electrical energy at any other voltage provided that it shall pay or reimburse the Attleboro Company for any expense or cost to it caused thereby.

770

771

#### ARTICLE II.

Such electrical energy shall be delivered by the Narragansett Company to the Attleboro Company

774

at the state line between the Town of Seekonk, Massachusetts, and the Town of East Providence, Rhode Island, and shall be metered on the secondary side of the transformers to be installed by the Attleboro Company at a sub-station furnished by the Attleboro Company at its expense in its present generating station or on the estate thereof located in the said City of Attleboro. konk Company shall secure the necessary rights of way and cause to be built a transmission line from the point of delivery of said electrical energy at the state line between said town of Seekonk, Massachusetts, and said East Providence, Rhode Island, to such point on the town line between the town of Seekonk and the City of Attleboro as will connect with the transmission line which the Attleboro Company shall cause to be built within the said city of Attleboro in the manner hereinafter set forth in order to transmit said electrical energy to said sub-station. In connection with the building of said transmission line within the town of Seekonk, the Narragansett Company does hereby covenant and agree to build the same for the Seekonk Company in a proper and workmanlike manner, using suitable and satisfactory material therefor and in accordance with the standard of good engineering practice, and the cost of building the same shall be paid by the Seekonk Company to the Narragansett Company when the same is completed, which cost, however, to the Seekonk Company shall include only the actual cost of material and labor and such other costs as would be considered assets to capitalize by the Massachusetts Board of Gas & Electric Light Commissioners, and

shall in no event exceed \$4,500 per mile. The said transmission line shall be the property of the said Seekonk Company and shall be free from any claim of ownership by the Narragansett Company. connection with the building of said transmission line within the city of Attleboro, the Narragansett Company does hereby covenant and agree to build the same for the Attleboro Company in a proper and workmanlike manner, using suitable and satisfactory material therefor and in accordance with the standard of good engineering practice, and the cost of building the same shall be paid by the Attleboro Company to the Narragansett Company when the same is completed, which cost, however, to the Attleboro Company shall include only the actual cost of material and labor and such other costs as would be considered assets to capitalize by the Massachusetts Board of Gas & Electric Light Commissioners, and shall in no event exceed \$4,-500 per mile. The said transmission line shall be the property of the said Attleboro Company and shall be free from any claim of ownership by the Narragansett Company.

During the life of this agreement the Narragansett Company hereby agrees to pay to the Seekonk Company and to the Attleboro Company respectively annually an amount equal to fifteen per centum (15%) of the amounts paid by the Seekonk Company and the Attleboro Company respectively to the Narragansett Company for the construction of said lines as hereinbefore provided, and the Seekonk Company and the Attleboro Company shall each at their own expense keep and maintain their respective lines in proper condition accord776

ing to the standard of good engineering practice for the transmission and receipt of such electrical energy, and in case said lines shall be damaged or destroyed in part or wholly, each shall repair, restore or rebuild the same to any extent necessary to put them in proper condition for such use without any expense therefor to the Narragansett Company. In the event the Seekonk Company shall neglect or fail to keep and maintain the transmission line within the town of Seekonk, constructed by the Narragansett Company and owned by the Seekonk Company, in proper condition according to the standard of good engineering practice for the transmission and receipt of such electrical energy, or in the event the same shall be damaged or destroyed in part or wholly, and the Seekonk Company shall neglect to repair, restore or rebuild the same as quickly as the same can be done with reasonable dispatch, to any extent necessary to put it in proper condition for such use, then the Attleboro Company may maintain said transmission line or repair, restore or rebuild the same if necessary, and all costs incurred by the Attleboro Company in so doing shall be repaid to it by the Seekonk Company. The Seekonk Company will make such additions to such transmission line to be built by it as may be necessary because of any increased demand of the Attleboro Company.

780

The Attleboro Company shall furnish and maintain in said sub-station proper main transformers and in addition thereto transformers of such smaller capacity as are required to minimize the transformer losses which shall be used during the periods of light load.

The Narragansett Company shall also pay to the Attleboro Company the sum of Seventeen Hundred and Fifty (\$1750) Dollars per year, payable in equal instalments monthly to reimburse the latter company in part for its expense relative to the operation of said sub-station to the extent operated by it, such payments to begin on the first day of the month next following the month in which the first delivery of such electrical energy shall be made under this agreement. In case at any time during the continuance of this agreement, by operation of law or for any reason, the electricity to be furnished and delivered hereunder cannot be transmitted to the sub-station of the Attleboro Company in Attleboro over said transmission lines within the said town of Seekonk and the city of Attleboro, or either of them, in lieu thereof if the same can be reasonably accomplished then the Attleboro Company shall furnish and maintain a line in said Attleboro and the Seekonk Company shall furnish and maintain a line in said Seekonk to take and for the transmission of such electrical energy to said sub-station at the expense of the company which has to furnish such new transmission line because of the reasons before mentioned, but the Narragansett Company shall without interruption continue to pay to the Seekonk Company and the Attleboro Company respectively under such circumstances fifteen per centum (15%) on the costs of said original lines as hereinbefore provided.

In addition to the said sum of fifteen per centum (15%) to be paid by the Narragansett Company to the Seekonk Company upon the cost of

782

said transmission line as built by the Narragansett Company for the Seekonk Company as hereinbefore provided, the Narragansett Company agrees to pay to the Seekonk Company fifteen per centum (15%) upon such additional sums annually as the Seekonk Company may from time to time expend for additions to its said line or upon such other line as may be built by it in accordance with the provisions of this contract and which expenditures would be considered assets to capitalize by the Massachusetts Board of Gas & Electric Light Commissioners.

785

786

In the event the said transmission line within the said town of Seekonk is used by the Seekonk Company for the transmission of electricity other than the electricity herein purchased and sold and transmitted, the Narragansett Company shall be entitled to such reduction of the payment by it to the Seekonk Company of said fifteen per centum (15%) annually as may be considered equitable.

#### ARTICLE III.

The Narragansett Company shall install and maintain as its property and at its expense, a proper meter or meters on the secondary side of transformers in the said sub-station of the Attle-boro Company, and the electrical energy supplied shall be measured thereby, and such meter or meters shall be read monthly on the last day of each month for the purpose of determining the electricity used during such month. Any duly accredited employees or agents of the Narragansett Company shall have a right of access to install, maintain,

examine, test and read such meter or meters at Such meter or meters, at all reasonable hours. any time or from time to time, may be tested by the Narragansett Company and shall be tested and calibrated upon written request of either the Narragansett Company or the Attleboro Company, and in the latter case such test and calibration shall be in the presence of representatives of both parties, and if any such meter is found to be inaccurate, it shall be restored to an accurate condition by the Narragansett Company or a new meter substituted. The readings of any such meter tested and found to be not more than two per centum (2%) from accuracy shall be considered accurate for the purpose of any previous bills but shall be corrected for the purpose of future bills. as a result of any such test any such meter shall be found to register in excess of two per centum (2%) either above or below accuracy, then the consumption recorded by such meter shall be corrected accordingly but not in any event for a longer period than thirty (30) days prior to the day of such test and provided further that such inaccuracy is less than ten per centum (10%). If the inaccuracy exceeds ten per centum (10%) the probable consumption shall be determined by agreement of the Narragansett Company and the Attleboro Company and in either event due credit or charge shall be made accordingly but not for a longer period than thirty (30) days prior to the day of such test. If at any time the meter furnished by the Narragansett Company shall fail to register, it shall be assumed that during such time as the meter failed to register electricity was taken by the Attleboro Company at the average

788

rate of consumption for the thirty days preceding the failure of the meter to so register, and bills shall be rendered accordingly.

#### ARTICLE IV.

The Attleboro Company shall pay to the Narragansett Company for all electrical energy supplied by it under this contract at the rate of 8.57 mills per kilowatt hour, as registered by such meter or meters and subject to correction as aforesaid. Bills shall be rendered during the first part of each current month for electricity delivered during the next preceding month and shall be due and payable within fifteen days after rendition.

#### ARTICLE V.

The price per kilowatt hour hereinbefore specified shall be subject to being increased or decreased at the rate of .085 mills per kilowatt hour for every ten cent (10c) variation from the base price of three and one-half (\$3.50) dollars per long ton for coal delivered alongside the then main steam generating station or stations of the Narragansett Company on the Providence River or Harbor or Narragansett Bay in the State of Rhode Island. In determining any such variation for each said monthly period, the average cost per such ton delivered as aforesaid of all the coal consumed in the production of such electrical energy during such monthly period shall be taken.

All bills for coal purchased by the Narragansett Electric Lighting Company shall be kept on file and at all reasonable times shall be open to the inspection of any duly authorized officers or agents of the Attleboro Company.

If the electrical energy supplied is produced by other means than the use of coal as fuel or partly thereby and partly by other means, the variation shall be figured on the difference between said sum of three and one-half (\$3.50) dollars and the best quoted price obtainable from reliable sources per such ton having a heat value of fourteen thousand five hundred (14,500) British Thermal units per pound of such quantity of coal to be delivered alongside any such station as hereinbefore provided and as would be required to produce such electrical energy, unless a material reduction in cost is thereby effected, in which event the provisions of Article VI of this contract shall control.

794

#### ARTICLE VI.

In case at any time during the continuance of this contract any discovery, invention or improvement in electrical machinery, appliances, fixtures or appurtenances for furnishing electricity shall be made or any other method of generating or obtaining electricity or power is discovered or adopted, whether by the use of fuel other than coal, or in whatsoever manner, and which if adopted and used by the Narragansett Company would be of such greater practical and commercial value than the means then employed or used by the Narragansett Company for furnishing such electrical energy as to reasonably warrant the Narragansett Company to adopt and use the same, and which if used would cause a material reduction in the cost to the Narragansett Company of supplying such elec-

trical energy, the Narragansett Company upon request by the Attleboro Company shall either adopt and use the same as soon as practicable after such request, and upon the same being so put in use, or in case of any failure of the Narragansett Company so to do as soon as practicable thereafter, said price for such electrical energy shall be reduced by the Narragansett Company to such an extent that the Attleboro Company shall receive the benefit of one-half of such reduced cost, or the reduced cost securable if the same were used, but in either case in axing such new price, due consideration shall be given to and allowance made for any increased or decreased rate of depreciation or obsolescence on the new machinery, appliances, fixtures or apparatus used, or if used, and to any increased depreciation or obsolescence on the old machinery, appliances, or apparatus discontinued, or if discontinued, before the expiration of the normal useful life of the same.

In case at any time during the continuance of this contract any law, ordinance, resolution, rule or regulation shall be imposed by any Federal, State or Municipal authority and which as a result imposes, removes, suspends or does away with any requirements or burdens, including any franchise taxes or any other special taxes or imposts, whether or not in addition to those now existing and which would materially increase or decrease the cost to the Narragansett Company of generating or otherwise obtaining or delivering electrical energy, said price for the same shall be increased or decreased by such amount as may be considered equitable under all the circumstances and provisions of this contract.

#### ARTICLE VII.

If at any time during the continuance of this contract, by reason of strikes, accidents, conditions of coal supply, or by reason of any cause or condition of any kind whatsoever beyond the reasonable control of either party hereto affecting the plants, lines or equipment of either party hereto or any sources of supply of the Narragansett Company, or of any action of the civil or military authorities, any party hereto shall be partially or wholly unable to deliver or take the electricity contracted for, or perform its transmission obligations hereunder, the obligation to deliver or take such electrical energy or perform its transmission obligations hereunder shall be suspended to the extent of the interruption, but the respective obligations of the parties shall revive and become operative for the balance of the unexpired term of this contract as soon as the cause of the interruption is removed. Each party shall use and exercise all reasonable remedies and diligence to remove the causes of the interruption, restore its plant and equipment, and resume and continue to deliver or take such electrical energy or perform its transmission obligations hereunder, and any party hereto doing the same shall not be liable to the other for such interruption.

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801

#### ARTICLE VIII.

Each party hereto shall furnish in accordance with good engineering practice all the equipment required by it to deliver, transmit or take such

electrical energy or perform its transmission obligations hereunder as herein provided, and shall keep and maintain the same in proper condition for such use in accordance with such practice.

#### ARTICLE IX.

Each party to this agreement assumes the responsibility of securing and retaining any and all necessary and reasonable original or substitute rights of way, permits or franchises for their respective poles, wires and other equipment and for the transmission of electricity thereby in and over the streets and highways and in and over such streets and highways as will furnish a reasonably direct course from the source of supply of such electrical energy to said point of delivery at the state line between the said town of Seekonk and the town of East Providence, Rhode Island, and therefrom to said Seekonk and Attleboro boundary line at said point of connection and from such point to the point of metering at the sub-station to be installed by the Attleboro Company on its premises as hereinbefore provided for in Article II, and each party agrees, without expense to it, to aid the others to secure and retain the same.

804

#### ARTICLE X.

If at any time a difference of opinion shall arise between the parties hereto in regard to their respective rights, duties and obligations, or any rights, duties or obligations of any of said parties, or any matter to be determined or done, under and within the terms and provisions of this contract, the question or questions in dispute shall be referred to a Board of Arbitration, consisting of three persons. One of the said arbitrators shall be chosen by the Narragansett Company, one by the Attleboro Company and the third by the two arbitrators so chosen unless the matter in dispute shall be wholly between the Narragansett Company and the Seekonk Company, in which case the said Narragansett Company and the said Seekonk Company shall each choose an arbitrator and the third shall be chosen by the two arbitrators so chosen, and the Attleboro Company shall not be a party to such arbitration, but the interests, or rights, duties and liabilities of the Attleboro Company shall not be affected by any Board of Arbitration chosen in the latter manner.

806

The party desiring an arbitration shall give to the other party or parties written notice of the same, setting forth therein the point or points in dispute with reasonable definiteness and the name and address of the person appointed by it as an arbitrator, together with a copy of the written acceptance of the appointment by such person. The party or parties to whom such notice and copy are given, within thirty (30) days after the receipt of the same, shall give written notice to the other party or parties of the name and address of the person appointed by it as an arbitrator, together with a copy of the written acceptance of the appointment by such person, and in case it shall fail so to do the arbitrator appointed by the other party in conformity herewith shall be the sole arbitrator. If

the two arbitrators chosen by the parties respectively shall not agree on a third arbitrator who will serve, within twenty days after notice is received of the appointment of and acceptance by the second arbitrator as aforesaid, the third arbitrator shall be chosen by the Judge of Probate for the time being for Bristol County, Commonwealth of Massachusetts, on the written application made to him by either one of the parties to such arbitration proceedings who have chosen the original arbitrators after at least three days notice in writing to the other party of the time and place of the application. The Board of Arbitrators, or the Arbitrator if but one, so chosen shall promptly proceed to give the parties and their counsel opportunity to be heard and to present their evidence, and after giving to each party hereto not less than ten (10) days notice of the time and place of the first meeting shall proceed expeditiously to hear and dispose of the matters in dispute, and in case of any further meeting, except an adjourned meeting to a definite time and place, like notice shall be given unless such notice is waived by both parties, in which case the hearing may proceed at an earlier date. The determination of such Board of Arbitrators or a majority of them, or of such sole arbitrator if there be but one, as to any and all matters so submitted to them or him, shall be final and conclusive upon the parties hereto, and said parties shall abide by such decision and perform the terms and conditions thereof as if the same were made a part of this agreement. If any arbitrator for any reason shall not serve or continue to serve, such vacancy, within twenty (20)

days after notice of its occurrence shall be filled in like manner as the original appointment of such arbitrator, and notice of the new appointment shall within said period of twenty (20) days be given to any party not making the appointment and to any remaining arbitrators. If such vacancy or notice be not so filled or given, the vacancy shall be filled by the Judge of Probate for the time being for Bristol County, Commonwealth of Massachusetts, in manner aforesaid. Any such other or new arbitrator shall have the powers and duties of the arbitrator whose place he takes. The reasonable fees and expenses of the arbitrators, or of the arbitrator if but one, shall be borne and shared by the parties hereto in such manner or in such proportions as the arbitrators, or the arbitrator if but one, shall award.

812

#### ARTICLE XI.

After the expiration of the fifteenth year of the term of this contract, the Narragansett Company or the Seekonk Company shall not be required to furnish in any one year any increased transmission facilities to provide for any increased demand in excess of twice the awerage rate per centum of increase per year during the period of fifteen years next preceding the time off such excess demands unless the Narragansett Company or the Seekonk Company is compensated therefor in such manner and amounts as may be determined by arbitration in the manner hereinbefore proviided.

#### ARTICLE XII.

The Attleboro Company, in consideration of said price for said supply of said electrical energy, agrees with the Narragansett Company that during the continuance of this agreement, it will retain and maintain at its own expense its present generating station and machinery, except its present engine driven units, and that the Narragansett Company may at any time or times use the same for the purpose of generating electrical energy and supplying the same to the Attleboro Company in performance wholly or in part of the agreement of the Narragansett Company herein to supply such electrical energy, but in the event of such use, the Narragansett Company shall pay all cost of operation and shall pay to the Attleboro Company any and all expense of the Attleboro Company caused by such use over and above the amount of its expenses in retaining and maintaining the same as above provided.

#### ARTICLE XIII.

The Narragansett Company does hereby guarantee to the Attleboro Company that the Seekonk Company will promptly and properly carry out all terms and provisions of this contract, and in the event of the failure of the Seekonk Company to properly perform and carry out the same, the Narragansett Company does hereby agree to hold the Attleboro Company harmless and to indemnify it for all loss, damage, costs and expense incurred or suffered by it by reason of said breach or failure on the part of the said Seekonk Company.

#### Exhibit No. 5

#### ARTICLE XIV.

This agreement shall run and be operative during said full term of twenty (20) years, and, unless at least a year prior to the end of said term either party hereto shall notify the other in writing that it will not permit the continuance thereof beyond said term, shall also continue thereafter in full force and effect to all intents and purposes and upon the same terms and conditions herein prescribed until terminated by one year's previous notice in writing from either party to the other.

818

#### ARTICLE XV.

This agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

In witness whereof the parties hereto have hereunto and to two other instruments of like tenor caused their corporate seals to be affixed and to be signed in their names and behalf by their respective officers thereunto duly authorized, the day and year first above written.

NARRAGANSETT ELECTRIC LIGHTING COMPANY
By EDWIN A. BARROWS, President
By WILLIAM G. NYE, Treasurer

819

Signed and sealed in presence of J. E. GRAY witness as to both (Corporate Seal)

# Exhibit No. 5

ATTLEBORO STEAM & ELECTRIC COMPANY
By THOMAS C. FALES, President
By VINCENT GOLDTHWAITE, Treasurer

CHANDLER M. WOOD
witness to both
(Corporate Seal)

SEEKONK ELECTRIC COMPANY

J. E. GRAY

(Corporate Seal)
By Edwin A. Barrows, President

#### COPY

R. I. P. U. C. No. 68

# NARRAGANSETT ELECTRIC LIGHT COM-PANY

SPECIAL RATE TO THE ATTLEBORO STEAM AND ELECTRIC COMPANY

# CHARACTER OF SERVICE

22,000 volt, 3 phase, 60 cycle alternating current delivered at the state line between the town of East Providence, Rhode Island, and the Town of Seekonk, Massachusetts.

# CONDITIONS

Transmission lines outside the State of Rhode Island to be furnished by foreign corporations for an annual payment of fifteen per cent. (15%) of their cost.

#### RATE

8.57 mills per kilowatt hour as registered by the meters installed in the sub-station of the Attleboro Steam & Electric Company.

The Narragansett Company to pay \$1750.00 per year for operation of the receiving substation.

Above price to be subject to increase or decrease for fluctuations in the cost of coal above or below \$3.50 per long ton alongside the Narragansett Electric Lighting Company's station; also to increase or decrease to cover in-

#### Exhibit No. 6

crease or decrease in regular or special taxes or new taxes.

#### TERM OF CONTRACT

Twenty (20) years and thereafter unless discontinued by either party.

#### Effective

#### Issued

(Stamped)
Received May 16, 1917
Public Utilities Commission
John W. Rowe, Secretary

# Narragansett Electric Lighting Company Providence, R. I.

# ANNUAL REPORT and STATEMENTS

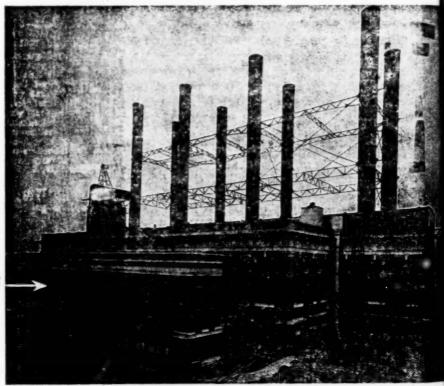


831

830

For the Fiscal Year Ending December 31, 1923

# Exhibit No. 7



833

SWITCH HOUSE

GENERATING STATION SHOWING NEW SWITCH HOUSE

#### Exhibit No. 7

#### DIRECTORS

WILLIAM W. DOUGLAS DANIEL A. PEIRCE GEORGE L. SHEPLEY H. MARTIN BROWN SAMUEL M. NICHOLSON STEPHEN O. METCALF BYRON S. WATSON RICHARD A. ROBERTSON ARTHUR B. LISLE R. H. IVES GODDARD EDWIN A. BARROWS RUSSLLL GRINNELL WILLIAM A. VIALL HOUGHTON P. METCALF PAUL C. NICHOLSON WILLIAM S. INNIS

# EXECUTIVE COMMITTEE

EDWIN A. BARROWS WILLIAM W. DOUGLAS GEORGE L. SHEPLEY

SAMUEL M. NICHOLSON H. MARTIN BROWN ARTHUR B. LISLE WILLIAM A. VIALL

836

## **OFFICERS**

President EDWIN A. BARROWS FRANKLIN L. HALL Assistant Treasurer LESLIE F. MOWRY

Vice-President WILLIAM W. DOUGLAS Secretary and Treasurer Assistant Secretary JESSE E. GRAY General Manager ARTHUR B. LISLE

> General Superintendent WESLEY T. OVIATT

Superintendent of Distribution 837 SAMUEL B. SWAN

Superintendent of Generation NICHOLAS STAHL

# TO THE STOCKHOLDERS OF THE NARRAGANSETT

#### ELECTRIC LIGHTING COMPANY

Following is the report of your Directors for the year ended December 31, 1923, which was the thirty-ninth year of the company:

Many important phases of our business have shown a remarkable growth. Constructive progress generally has been made.

The Melrose Service Station in Elmwood was completed the early part of the year and is in constant use. This development gives our operating departments enlarged facilities for carrying on the company's business and reflects itself in the greater efficiency of the entire operating force. It is considered one of the best and most practical for efficient work in the country.

The new switch house, which is rapidly nearing completion at our Plant on Eddy Street, is of the latest design and contains the most modern type of equipment.

When in operation it will greatly improve conditions and will benefit our customers by a greater reliability of service, which is of the utmost importance.

The number of customer-stockholders has largely increased during the year, thus bringing closer personal relations between the company and those whom it serves.

The gross and net earnings of the company were materially larger than in previous years and your company today is in a prosperous condition.

Relations with the public have continued to be

839

cordial. The management realizes that in conducting its business the goodwill and friendship of the public, as well as a better understanding of the company's policies by those with whom it does business, is most essential.

In order to properly serve the community and provide the necessary extensions of lines and plant to take care of our rapid growth a large amount of capital is needed every year. Rates fair to the consumer, and satisfactory earnings, will insure this flow of capital from our ever increasing number of stockholders and from the public.

As has been our custom in past years, we desire in this report to call to your attention certain results from company operations during the year, which we think will be of interest to every stockholder.

842

#### REVENUE AND EARNINGS

The total revenue for the year amounted to \$6,636,600, an increase of \$1,061,775. The net income for the year, after deducting all operating expenses, interest, taxes, depreciation, etc., amounted to \$1,595,848. The regular dividend of 8% per annum on the capital outstanding has been earned, and \$293,392 has been added to the surplus account. In setting aside the depreciation for the year, your Directors have taken what they felt to be a reasonable and adequate amount for depreciation and obsolescence.

During the year 359,746,610 kilowatt-hours were generated at our Plant, some 80,000,000 kilowatt-

hours or nearly 30% greater than in 1922. This is by far the largest output in the company's history. The electricity generated in the month of August alone was nearly as much as was generated during the entire year of 1913, ten years ago. This in itself indicates the somewhat amazing growth of the company during the past few years.

#### PROPERTY AND PLANT

Additions to the property and plant have amounted to \$2,111,616 during the year. This sum includes final payments for our new Service Station on Melrose Street, of \$321,134.

Payments on the new Switch House and equipment at the Generating Plant have amounted to \$759,309.

Additions to the transmission system have amounted to \$160,000 and to the distribution system, \$675,000. Both of these amounts cover poles, wires, transformers, meters, and other equipment necessary to bring the electricity from the Generating Plant to the customer's premises. These seemingly large amounts were necessary to provide for the company's large increase in business.

#### FINANCIAL

846

The issue of the Convertible Notes of July, 1920, matured July 1, 1923. The majority of these were converted into stock at different interest periods, leaving a comparatively small amount to be taken care of at maturity. All of the Convertible Notes issued have now been converted into the Capital

Stock of the company. At the present time there are no securities outstanding other than the regular Common Stock of \$16,320,000.

It is with considerable satisfaction that we announce that the number of stockholders increased to approximately 11,000, a gain of 2,700 during the year. This increase has come almost entirely from our regular customers. In April the company purchased some 7,000 shares of its own Stock through the various brokerage houses in the City, and resold these at cost to those of our customers who were not already shareholders—not over five shares to any one person. By this means alone 1,666 new stockholders were added to the list. An analysis of our stockholders shows that we have persons in more than a hundred different occupations owning Narragansett Stock. The list includes representatives from nearly every walk in life.

848

The following schedule shows some interesting facts relative to the holdings of our stockholders.

|       |    | okholde |        | Number<br>of Stock-<br>holders | of Total<br>Number of<br>Stockholders | Shares<br>Owned | of Total<br>Number of<br>Shares |  |
|-------|----|---------|--------|--------------------------------|---------------------------------------|-----------------|---------------------------------|--|
| 1     | to | 5       | shares | 4,065                          | 43%                                   | 17,857          | 6%                              |  |
| 6     | to | 10      | 64     | 2,276                          | 17%                                   | 19,145          | 5%                              |  |
| 11    | to | 25      | 64     | 1.925                          | 19%                                   | 33,818          | 11%                             |  |
| 26    | to | 50      | 44     | 1.001                          | 10%                                   | 37,875          | 12%                             |  |
| 51    | to | 100     | 64     | 551                            | 5%                                    | 41,088          | 12%                             |  |
| 101   | to | 200     | 44     | 329                            | 3%                                    | 48,207          | 16%                             |  |
| 201   | to | 300     | 44     | 109                            | 1%                                    | 32,037          | 10%                             |  |
| 301   | to | 400     | 66     | 52                             | 1%                                    | 18,637          | 6%                              |  |
| 401   | to | 500     | 44     | 25                             |                                       | 11,607          | 3%                              |  |
| 501   |    | 1,000   | 44     | 46                             | 1%                                    | 31,913          | 10%                             |  |
| 1.001 | to | 2,000   | 44     | 9                              | ***                                   | 11.317          | 3%                              |  |
| 2,001 | to | 3,000   | 44     | 5                              |                                       | 11,718          | 3%                              |  |
| 3,001 | to |         | 8.0    | 1                              |                                       | 3,063           | 1%                              |  |
| 4,001 |    | 5,000   | 44     | 2                              |                                       | 8,118           | 2%                              |  |
|       |    | Total   |        | 10,396                         | 100%                                  | 326,400         | 100%                            |  |

# CUSTOMERS

The growth of the number of customers during the year has been remarkable. Our books show a gain of 11,484 over the previous year, the largest in the company's history. This is at the rate of almost 1,000 each month. In other words, our Distribution Department has run services and installed meters for new customers on an average of about forty every working day. There are now on the company's books 71,554 customers.

# 851 HOUSE WIRING CAMPAIGNS AND MERCHANDISE SALES

During the year the company has been carrying on an intensive house and store wiring campaign. The result has been that 2,742 of the older type houses, some of them for two and three families, and sixty-seven stores, have been wired for electric service. This alone has increased the number of our customers by 5,046. The estimated gross income from this business is figured at \$126,150. These campaigns will be continued during the year 1924, as there are fully 25,000 houses in the company's territory still without electric service.

The company has a well organized Merchandising Department which has made sales of electrical appliances and lamps during the year in the amount of \$746,947.

In addition to the Electric Shop in the Turks Head Building, there are branch stores in Bristol, Warren, Attleboro, Arctic, East Greenwich, Olneyville and Washington Park. These Electric Shops are attractive additions to the neighborhood in

which they are situated, and are a great convenience to our customers in the various localities. Sales of appliances during the year included 3,120 Vacuum Cleaners, 7,637 Flat Irons, 7,885 Portable Lamps, 718 Washing Machines, and 40 Electric Ranges. The income from electricity used by these appliances is estimated to be \$110,000 per year.

853

# FUEL SUPPLY Exhibit No. 7

Nearly all of the fuel burned under the boilers during the year was oil, and amounted to approximately 1,277,925 barrels. As in the past, the efficiency of oil for fuel has proved very satisfactory. We have been purchasing the oil under a favorable contract, both as regards service and price. The oil supply for the current year of 1924 has been contracted for.

854

# SUBSIDIARY COMPANIES

Our subsidiary companies, consisting of the Narragansett Pier Electric Light and Power Company, the Wickford Light and Water Company, the Westerly Light and Power Company, the Mystic Power Company, and the Seekonk Electric Company, are in good condition. All of these companies have made additions to their property and plant during the year and have increased their business to a very considerable extent.

855

# EMPLOYEES

The employees of the Company have shown the same faithful support and loyalty as in previous years.

Life insurance on the group plan was continued through the year 1923. There were six deaths among our employees during this period, and insurance to the amount of \$5,400 was paid to beneficiaries.

The employees have continued paying on their shares of company stock subscribed for in 1922. These shares will be fully paid for next August. At the present time over 50% of our employees are stockholders in the company.

During the year the company again purchased coal for its employees for household use, and sold to them at the rate of 50c per ton per week, same being deducted from the pay envelope.

The Nelco News, which is a monthly publication of the employees, has been carried on successfully another year and is now in its sixth year.

The Nelco Athletic Club, which promotes athletic sports, recreation and entertainments for the employees; also, the Nelco Mutual Benefit Association, a sick benefit organization, are both in excellent condition.

An outing for the office employees was held at Pomham Club in July, and one for the station employees at Rocky Point in August. Both of these outings were largely attended.

858

# GENERAL

The following schedule shows the general growth of the company in capital stock, revenue, output and customers:

|      | Capital<br>Stock | Total<br>Revenue | K. W. H.<br>Generated | Number of<br>Customers |
|------|------------------|------------------|-----------------------|------------------------|
| 1914 | \$6,000,000      | \$1,670,654      | 47,405,874            | 22,125                 |
|      | 6,500,000        | 1.834.840        | 61,026,430            | 25,194                 |
| 1915 | 7,500,000        | 2.072.784        | 73.094,698            | 28,817                 |
| 1916 | 10,200,000       | 2.566,003        | 113,238,441           | 31,375                 |
| 1917 |                  | 3,464,623        | 150,028,780           | 32,368                 |
| 1918 |                  | 3.856.083        | 155,678,890           | 36,216                 |
| 1919 |                  | 4.995.315        | 207,967,950           | 42,790                 |
| 1920 |                  | 5.049.066        | 299,667,600           | 49,809                 |
| 1921 |                  | 5,574,825        | 277,993,260           | 59,985                 |
| 1922 | 16,320,000       | 6,636,600        | 359,746,610           | 71,554                 |
|      |                  |                  |                       |                        |

We have every reason to believe that the year 1924 will show continued prosperity and further increases in business and earnings.

The work of gradually changing over our 250 volt lighting system to 104 volts has been continued during the year. Customers in Bristol, Warren, Barrington, South Auburn, Eden Park, East Greenwich and Apponaug have all been changed over. Good progress is being made in other sections. The entire work of changing over the voltage in all our territory is an undertaking that will require a number of years and will cost a large amount of money. It will, however, when accomplished, be to the mutual advantage of both the customers and the company.

This company supplies to the community indispensable necessities. The growth and prosperity of our territory is more and more dependent on the prosperity of its public utilities. The welfare of one is largely dependent on the other.

We believe that strong and successful utilities are an asset to the cities and towns they serve. On the other hand, unsuccessful utilities, unable to obtain the capital needed to make extensions and improvements, must of necessity render poor service and are a hindrance to growth and welfare.

860

862

# Exhibit No. 7

The public today realizes these facts to a greater extent than ever before.

It is with pleasure that your Directors once more acknowledge their appreciation of the untiring efforts of the officers and employees who have made possible the efficient conduct of the company's business and who have loyally promoted its best interests.

Respectfully submitted,

For the Board of Directors,

EDWIN A. BARROWS,

President.

# CONDENSED BALANCE SHEET

December 31, 1923

# ASSETS

|      | Property and Plant, less Reserve                       |                         |
|------|--|-------------------------|
|      | for Depreciation                                       | \$16,190,890.84         |
|      | Materials and Supplies<br>Securities Owned, Subsidiary | 796,868.54              |
|      | Companies  | 1,070,530.78            |
|      | Other Securities Owned                                 | 1,000.00                |
|      | Deposits in Banks and Cash in                          |                         |
|      | Office   | 206,307.30              |
|      | Due from Subsidiary Companies.                         | 27,592.94               |
| 869  | Notes Receivable, Subsidiary Com-                      |                         |
| 1700 | panies   | 245,000.00              |
|      | Notes Receivable, Miscellaneous.                       | 4,170.00                |
|      | Accounts Receivable, Light and                         |                         |
|      | Power  | 643,347.57              |
|      | Accounts Receivable, Merchandise                       |                         |
|      | and House Wiring                                       | 660,403.89              |
|      | Accounts Receivable, Stock Sub-                        |                         |
|      | scription Installments                                 | 42,472.01               |
|      | Prepaid Taxes, Insurance, Inter-                       |                         |
|      | est, etc   | 246,082.33              |
|      | Total  | <b>\$</b> 20,134,666.20 |
|      | LIABILITIES  |                         |
|      | Capital Stock, 326,400 Shares of                       |                         |
|      | \$50.00 each   | \$16,320,000.00         |
| 870  | Accounts Payable                                       | 480,331.00              |
|      | Notes Payable  | 1,310,000.00            |
|      | Due to Subsidiary Companies                            | 263,332.89              |
|      | Taxes and Interest Accrued                             | 257,979.09              |
|      | Dividend Payable January 2, 1924                       | 326,400.00              |
|      | Miscellaneous Reserves                                 | 460,000.00              |
|      | Miscellaneous Unadjusted Credits                       | 6,870.03                |
|      | Surplus  | 709,753.19              |
|      | Total  | \$20,134,666.20         |

871

# CONDENSED INCOME ACCOUNT

For the Year Ended December 31, 1923

Total Revenue from all Sources... \$6,636,601.17
Operating Expenses. \$4,383,313.69
Depreciation and Obsolescence, etc... 496,719.13
Interest and Other Deductions from In-

160,719.41 5,040,752.23

Disposition of Net Income:

come ......

\$1,595,848.94

### CABLE ADDRESS "ERNSTAUDIT" NEW YORK

NEW YORK
PHILADELPHIA
BOSTON
PROVIDENCE
BALTIMORE
WASHINGTON
RICHMOND
BUFFALO
PITTSBURG
CLEVELAND
CINCINNATI
TOLEDO
DETROIT

# ERNST & ERNST

TAX SERVICE

PROVIDENCE
HOSPITAL TRUST BLDG.

CHICAGO
MINNEAPOLIS
ST. PAUL
INDIANAPOLIS
DENVER
PT. LOUIS
KANSAS CITY
NEW ORLEANS
ATLANTA
DALLAS
FORT WORTH
HOUSTON

January 28, 1924.

MR. EDWIN A. BARROWS, President,
Narragansett Electric Lighting Company,
Providence, R. I.

### Dear Sir:

In accordance with your instructions we have made an audit of the books of account and records of the Narragansett Electric Lighting Company, Providence, R. I., for the year ended December 31, 1923.

The cash resources of the Company at December 31, 1923, were fully accounted for either by actual count or by reconciliation of the book records with certificates received direct from the depositories. We made substantial tests of the cash receipts and disbursements for the year under review and found that recorded cash receipts had been properly accounted for and disbursements had been made on properly authorized vouchers in the periods coming within the scope of our tests.

Investments in and notes and accounts receivable of subsidiary companies and other accounts receivable and miscellaneous assets shown on the

attached Balance Sheet were accounted for. We satisfied ourselves that all additions to Property and Plant account were proper charges thereto and that a reasonable allowance had been made during the year for depreciation.

Provision has been made on the attached Balance Sheet for all known liabilities of the Company existing at December 31, 1923, except certain invoices for materials in transit, supplies not included in inventories, etc., which were not received or entered on the books before closing.

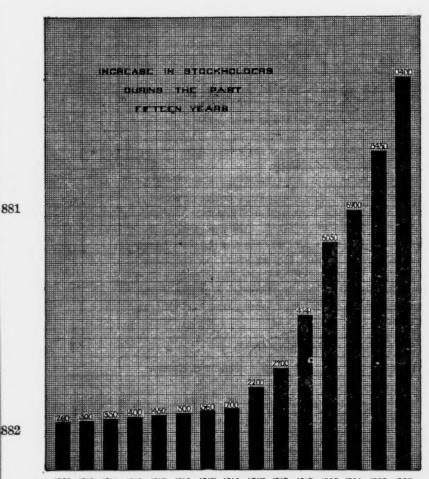
Subject to the foregoing comments WE HEREBY CERTIFY that we have audited the books of account and records of the Narragansett Electric Lighting Company, Providence, R. I., for the year ended December 31, 1923, and that it is our opinion, based upon our examination and information submitted to us, that the annexed Balance Sheet reflects the financial condition of the Company at December 31, 1923, and that the relative statement of Income is correct.

Yours very truly,

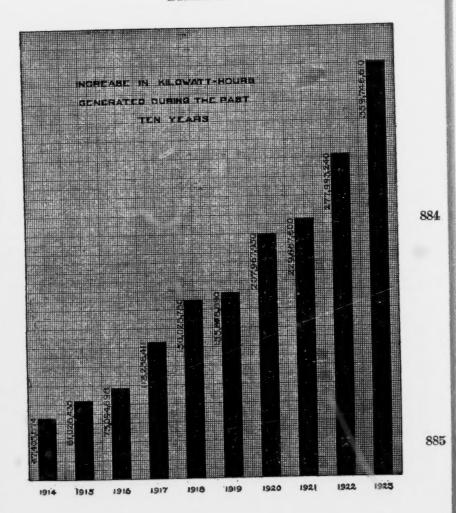
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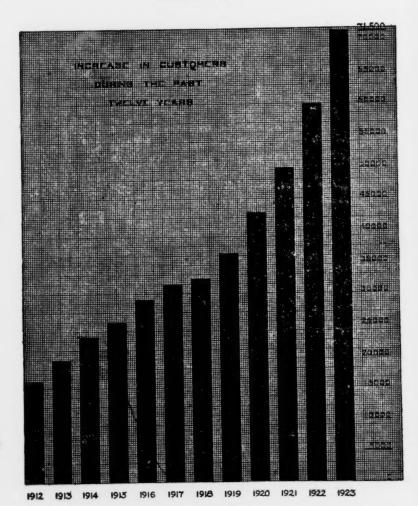
879



1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923



# Exhibit No. 7



# DURING THE PAST TEN YEARS









# PEAK LOADS CARRIED BY STATION WITH TURBINES OUT OF COMMISSION DUE TO ACCIDENT

Received June 12, 1924 Public Utilities Commission State of Rhode Island

On July 11th there was a failure of the armature of turbine #1, a 45,000 K.V.A. unit. Repairs on this unit were not completed until October 3rd. From June 18th to July 27th turbine #6, a 20,000 K.V.A. turbine was also out of service, due to a field failure. During the period that both of these turbines were down, July 11th to July 27th, we were able to carry on each day the following loads:

893

| 1923 |   | K.W.  | Tim  | ie  |   |
|------|---|---|--|---|---|
| July | 12  | 54,000  | 3- 5 P   | .м. 10—11 Р.М.  |   |
| 44   | 13  | 54,000  | 4- 5 P   | .M.   |   |
| 44   | 14  | 53,000  | 9—10 P   | .M.   |   |
| 44   | 15  | 45,000  | 9-10 P   | .M.   |   |
| 46   | 16  | 57,000  | 1011 A   | .М.   |   |
| 66   | 17  | 57,000  | 1- 2 P   | .M. 9-10 P.M.   |   |
| 66   | 18  | 57,000  | 2 3 F  | .M.   |   |
| 44   | 19  | 59,000  | 10-11 F  | .M.   |   |
| 44   | 20  | 56,000  | 9-10 A   | .M. 2— 3 P.M.   |   |
| 44   | 21  | 54,000  | 9-10 F   | .M.   |   |
| 44   | 22  | 53,000  | 9—10 I   | .M.   |   |
| 66   | 23  | 57,000  | 8- 9 A   | .M. 2- 3 P.M.   |   |
| 66   | 24  | 57,000  | 1-2 H  | .M. 8-10 P.M  |   |
| 66   | 25  |   |  |   |   |
| 66   |   |   | 9-10 A   | .M. 2- 3 P.M  |   |
| 66   | 27  | 57,000  |  |   |   |
|      | July "" "" "" "" "" "" "" "" "" "" "" "" "" | July 12 " 13 " 14 " 15 " 16 " 17 " 18 " 19 " 20 " 21 " 22 " 23 " 24 " 25 " 26 | July 12 54,000 " 13 54,000 " 14 53,000 " 15 45,000 " 16 57,000 " 17 57,000 " 18 57,000 " 19 59,000 " 20 56,000 " 21 54,000 " 22 53,000 " 23 57,000 " 24 57,000 " 25 57,000 " 26 57,000 | July     12     54,000     3— 5 P       "     13     54,000     4— 5 P       "     14     53,000     9—10 P       "     15     45,000     9—10 P       "     16     57,000     16—11 A       "     17     57,000     1— 2 P       "     18     57,000     2— 3 P       "     19     59,000     10—11 P       "     20     56,000     9—10 A       "     21     54,000     9—10 P       "     22     53,000     9—10 P       "     23     57,000     8— 9 A       "     24     57,000     1— 2 P       "     25     57,000     1— 2 P       "     26     57,000     9—10 A | July     12     54,000     3— 5 P.M. 10—11 P.M.       "     13     54,000     4— 5 P.M.       "     14     53,000     9—10 P.M.       "     15     45,000     9—10 P.M.       "     16     57,000     16—11 A.M.       "     17     57,000     1— 2 P.M.     9—10 P.M.       "     18     57,000     2— 3 P.M.       "     19     59,000     10—11 P.M.       "     20     56,000     9—10 A.M.     2— 3 P.M.       "     21     54,000     9—10 P.M.       "     22     53,000     9—10 P.M.       "     23     57,000     8— 9 A.M.     2— 3 P.M.       "     24     57,000     1— 2 P.M.     8—10 P.M.       "     25     57,000     1— 2 P.M.       "     26     57,000     9—10 A.M.     2— 3 P.M. |

On July 27th the 20,000 K.V.A. turbine was put into service leaving the 45,000 as the only large turbine down which itself was put back on the line

October 3rd. During this period we were able to carry on each day the following loads:

| 1923   |    | K.W.   | Time                   |
|--------|----|--------|------------------------|
| July   | 28 | 51,000 | 9-10 P.M. (Saturday)   |
| 66     | 29 | 35,000 | 9-10 P.M. (Sunday)     |
| 66     | 30 | 67,000 | 2— 3 P.M.              |
| 66     | 31 | 74,000 | 9—10 P.M.              |
| August | 1  | 73,000 | 9—10 A.M.              |
| "      | 2  | 76,000 | 1— 2 P.M.              |
| 66     | 3  | 71,000 | 10—12 P.M. 2— 3 P.M.   |
| 66     | 4  | 69,000 | 8— 9 P.M.              |
| 44     | 5  | 53,000 | 9—10 P. M.             |
| 66     | 6  | 74,000 | 9—10 P.M.              |
| 46     | 7  | 71,000 | 2— 4 P.M.              |
| 66     | 8  | 70,000 | 9-11 P.M. 1-4 P.M.     |
|        |    |        | 9—10 P.M.              |
| 66     | 9  | 71,000 | 2— 3 P.M.              |
| 66     | 10 | 70,000 | 9—10 P.M.              |
| 46     | 11 | 72,000 | 10—11 P.M.             |
| 66     | 12 | 54,000 | 9—10 P.M.              |
| 46     | 13 | 71,000 | 10-12 A.M. 1-2 P.M.    |
| 44     | 14 | 72,000 | 2— 3 P.M.              |
| 44     | 15 | 72,000 | 10—11 P.M.             |
| 1923   |    | K.W.   | Time                   |
| August | 16 | 71,000 | 9-10 A.M. 8-9 P.M.     |
| "      | 17 | 72,000 | 2— 3 P.M.              |
| 46     | 18 | 71,000 | 10—11 P.M.             |
| 66     | 19 | 54,000 | 8— 9 P.M.              |
| 66     | 20 | 72,000 | 9—11 P.M.              |
| 46     | 21 | 71,000 | 4-5 P.M. 8-10 P.M. 897 |
| 46     | 22 | 71,000 | 3— 5 P.M. 9—10 P.M.    |
| 46     | 23 | 71,000 | 4— 5 P.M. 9—10 P.M.    |
| 66     | 24 | 71,000 | 3— 4 P.M. 9—11 P.M.    |
| 66     | 25 | 71,000 | 8— 9 P.M.              |
| 66     | 26 | 48,000 | 10-11 P.M.             |
| 46     | 27 | 72,000 | 1— 2 P.M. 8—11 P.M.    |
| 44     | 28 | 71,000 | 9—12 A.M. 1— 4 P.M.    |
| 66     | 29 | 71,000 | 10—11 A.M. 1— 3 P.M.   |

|     | 44        | 30 | 72,000 | 10-11   | A.M. |       |      |
|-----|-----------|----|--------|---------|------|-------|------|
|     | 66        | 31 | 72,000 | 3- 5 1  | P.M. | 8-10  | P.M. |
|     | September | 1  | 67,000 | 9-10 1  | P.M  |       |      |
|     | - "       | 2  | 48,000 | 8- 9 1  | P.M. |       |      |
|     | "         | 3  | 49,000 | 9-10    | P.M. |       |      |
|     | **        | 4  | 72,000 | 2-31    | P.M. |       |      |
|     | 44        | 5  | 72,000 | 10-11   | A.M. |       |      |
|     | 44        | 6  | 72,000 | 8- 9 /  | A.M. |       |      |
|     | 66        | 7  | 71,000 | 10-11   | A.M. | 1-3   | P.M. |
|     |           |    |        | 4- 5 I  | P.M. | 9-11  | P.M. |
|     | 66        | 8  | 52,000 | 7-8     |      |       |      |
|     | 66        | 9  | 41,000 | 8-91    | P.M. |       |      |
|     | 66        | 10 | 71,000 | 9-10    | A.M. | 3-5   | P.M. |
|     |           |    |        | 9-11 1  | P.M. |       |      |
|     | "         | 11 | 71,000 | 9-10    | A.M. | 1-4   | P.M. |
| 899 |           |    |        | 8-10 I  | P.M. |       |      |
|     | 66        | 12 | 71,000 | 9-10    | A.M. | 2-3   | P.M. |
|     |           |    |        | 9—10 I  | P.M. |       |      |
|     | 66        | 13 | 71,000 | 10-11   | A.M. | 3-4   | P.M. |
|     | "         | 14 | 71,000 | 10—11 I |      |       |      |
|     | 44        | 15 | 72,000 | 8- 9 1  | P.M. |       |      |
|     | "         | 16 | 62,000 | 8-91    | P.M. |       |      |
|     | "         | 17 | 68,000 | 3-4 I   | P.M. | 9-10  |      |
|     | "         | 18 | 69,000 | 3-4 I   | P.M. | 6-7   |      |
|     | "         | 19 | 69,000 | 1-3 1   | P.M. | 9-10  | P.M. |
|     | 44        | 20 | 71,000 | 3— 4 I  | Ρ.М. | 5 - 8 |      |
|     | "         | 21 | 71,000 | 9—10 A  | L.M. | 3-4   | P.M. |
|     | u         | 22 | 66,000 | 9-10 A  | L.M. |       |      |
|     | "         | 23 | 26,000 | 7— 8 I  | P.M. |       |      |
|     | **        | 24 | 71,000 | 10—12 A |      |       |      |
|     | "         | 25 | 72,000 | 1- 2 I  |      |       |      |
| 000 | "         | 26 | 71,000 | 3— 8 I  |      | 9—11  |      |
| 900 | **        | 27 | 71,000 | 3-8 I   |      | 9—11  |      |
|     | 66        | 28 | 71,000 | 2-5 I   |      | 6-8   | P.M. |
|     | 44        | 29 | 70,000 | 10—11 A |      |       |      |
|     | "         | 30 | 35,000 | 7— 8 A  |      | 5—6   | P.M  |
|     | October   | 1  | 72,000 | 7— 8 I  |      |       |      |
|     | "         | 2  | 71,000 | 10—11 A |      | 3—11  |      |
|     | "         | 3  | 71,000 | 9—11 A  |      | 2-3   |      |
|     |           |    |        | 4-5 F   |      | 6- 9  | A.M. |
|     |           |    |        | 10-11 A | L.M. |       |      |

# HIGHEST PEAK LOAD\* IN EACH MONTH

Received June 12, 1924 Public Utilities Commission State of Rhode Island

| 1923      |    | K.W.   | Time                 |     |
|-----------|----|--------|----------------------|-----|
| January   | 8  | 79,000 |                      |     |
|           | 12 | 79,000 |                      |     |
| 66        | 15 | 79,000 |                      |     |
| February  | 7  | 78,000 |                      |     |
| 44        | 13 | 78,000 |                      |     |
| 44        | 28 | 78,000 |                      |     |
| March     | 6  | 84,000 | 10—11 A.M. 2— 4 P.M. |     |
| 66        | 7  | 84,000 | 10—11 A.M.           |     |
| 66        | 30 | 84,000 | 3— 4 P.M.            | 902 |
| April     | 6  | 84,000 | 3— 4 P.M.            |     |
| 44        | 9  | 84,000 | 1— 2 A.M.            |     |
| 44        | 11 | 84,000 | 9—10 A.M.            |     |
| May       | 9  | 75,000 |                      |     |
| June      | 5  | 71,000 |                      |     |
| 66        | 6  | 71,000 |                      |     |
| 46        | 13 | 71,000 |                      |     |
| 44        | 15 | 71,000 |                      |     |
| July      | 5  | 71,000 |                      |     |
| 44        | 6  | 71,000 |                      |     |
| 44        | 13 | 71,000 |                      |     |
| 66        | 15 | 71,000 |                      |     |
| August    | 1  | 76,000 |                      |     |
| September | 4  | 72,000 |                      |     |
| 44        | 6  | 72,000 |                      |     |
| 44        | 15 | 72,000 |                      |     |
| 66        | 25 | 72,000 |                      | 903 |
| October   | 23 | 81,000 | 3— 6 P.M.            |     |
| 66        | 30 | 81,000 | 9-11 A.M. 2-3 P.M.   |     |
| November  | 21 | 88,000 | 4— 5 P.M.            |     |
| 64        | 23 | 88,000 | 4— 5 P.M.            |     |
| December  | 17 | 88,000 | 4— 5 P.M.            |     |
|           |    |        |                      |     |

| 1924     |    |        |                    |  |
|----------|----|--------|--------------------|--|
| January  | 22 | 87,000 | 4-5 P.M.           |  |
| 66       | 29 | 87,000 | 10-11 A.M.         |  |
| February | 19 | 88,000 | 3— 4 P.M.          |  |
| March    | 4  | 86,000 | 9-11 A.M. 3-4 P.M  |  |
| April    | 1  | 82,000 | 10-11 A.M. 1-2 P.M |  |
| 66       | 2  | 82,000 | 9—10 A.M.          |  |
| May      | 20 | 69,000 |                    |  |

From January 1, 1923 to June 1, 1924-

88,000 K.W. on 4 occasions of 1 hour each 87,000 K.W. on 2 occasions of 1 hour each 86,000 K.W. on 2 occasions of 1 hour each

\* Peak load equals kilowatt hours in any one hour

Received June 12, 1924 Public Utilities Commission State of Rhode Island (Stamped)
Public Utilities Commission
State of Rhode Island
Docket No. 114

# LOSS TO THE NARRAGANSETT COMPANY UNDER SCHEDULE No. 68

Received June 12, 1924 Public Utilities Commission State of Rhode Island

On April 1, 1918 the Narragansett Company began to supply electricity to the Attleboro Company and has continued such supply up to the present time. Under Schedule No. 68 the charge for such electricity consisted of a price of \$.00857 per kilowatt hour subject to increase or decrease for variation in coal cost and subject to further increase or decrease for change in taxes. There are also certain payments to be made in respect of transmission lines and sub-station operation.

Under this schedule the loss to the Narragansett Company for the period of the contract will be \$1,512,662.91 (see page 5). In arriving at this figure we have proceeded as follows:

The kilowatt hours sold to the Attleboro Company from 1918 to and including 1923 are taken from actual readings of meters located either at the East Providence Sub-Station or at the plant of the Attleboro Company. The kilowatt hours for 1924 are based on an ascertained demand in conjunction with the load factor of the preceding year. The kilowatt hours from 1925 to and including 1937 are as-

908

911

certained by using an annual growth of 10.1%. This has been the average rate of growth for the seventeen year period ending with the year 1924. Wherever necessary to ascertain the kilowatt hours at a location other than the one where they were metered, a loss between the East Providence Sub-Station and the Attleboro Company's plant of 7% is assumed.

The unit generating and delivery cost from 1918 to and including 1923 (see pages 6 to 9 inclusive) is obtained in the manner set forth in a previous exhibit entitled "Basis of Schedule R. I. P. U. C. No. 125". Such cost for 1924 is the same as that for 1923 allowing, however, for increased cost of fuel. Such cost for 1925 to and including 1937 (see page 10) is based upon the generating and delivery cost for 1923 substituting, however, fuel at \$4.70 per ton in place of the actual cost of such fuel.

The total generating and delivery cost is ascertained by multiplying the kilowatt hours sold each year as measured at the East Providence Sub-Station by the unit generating and delivery cost ascertained as above. In basing the generating cost upon fuel at \$4.70 per ton at our plant we have assumed that coal will be the fuel used and that it will cost \$4.50 per gross ton alongside our station. although approximately \$1.00 more than the prewar price of coal, does not seem excessive for the next thirteen years. We have, of course, used the same alongside price of \$4.50 per gross ton in computing the cost to the Attleboro Company under Schedule No. 68. It has seemed proper to base our calculations upon the use of coal rather than oil because of the difference in the present market price

of these two forms of fuel, the likelihood of coal continuing to cost less than oil for equal thermal value and because of the rapid advances which have been made in the last year in the use of pulverized coal, which will undoubtedly enable us to obtain the same loiler capacity and efficiency with this fuel as with oil.

In computing the capital cost which should be allocated to the Attleboro Company (see pages 11 and 12) we have used a demand for the Attleboro Company from 1918 to and including 1922 ascertained by taking a load factor of 25.5%. The demands for 1923 and 1924 were ascertained as set forth in our previous exhibits. The demands from 1925 to the expiration of the period of the contract were based on the assumption that the load factor for 1925 and thereafter would be the same as that of 1923 and 1924; namely, 32.1%.

The generating plant cost as well as the cost of cables, transformers, ducts, sub-station and transmission line from 1918 to and including 1922 (see pages 13 to 17 and 20 to 23) were ascertained in the same general manner as the corresponding costs for 1923 and 1924 shown on our previous exhibits (see pages 18 and 19, 25 and 26). For the balance of the contract period, that is, from 1925 to and including 1937 we have assumed that the unit cost of the above mentioned property would remain of the same value as that of 1924.

In actual practice, unit costs fluctuate to a considerable extent due to the economic necessity of increments whether to the generating plant, substations, cables or transmission lines being ordinarily of larger size than is needed for the immedi-

914

ate load. For instance, when the Attleboro load approaches somewhat closer to the capacity of the present line it will be necessary to provide another line which may or may not follow the present route. The unit cost of transmission facilities at this time will be at a maximum and will gradually decrease as the load increases until it is necessary to install another transmission line when the unit cost will again increase. These fluctuations in cost will continue as long as the load continues to increase. In taking a uniform unit cost we have assumed such cost to be the average over the entire period from 1925 to 1937 inclusive.

917

When it is taken into consideration that the boiler house extension at an estimated cost of \$1. 050,000 used in the 1924 figures has a very slight effect on the average cost for such year, being added during the last month of the year and that such investment will have a much greater effect during 1925 and subsequently, that during 1925 a new turbo generator of possibly 30,000 K. W. capacity will be installed at an estimated cost of approximately \$1,000,000, also a new intake tunnel for condensing water costing possibly \$135,000 and further that within a few years it will be necessary to construct a new station at a different location at an initial cost of \$5,000,000 to \$7,000,000 such station having an initial capacity of possibly 30,000 to 40,000 K. W., the above figures may appear too low. We feel that they actually are too low, but wish to err in this direction.

918

The loss to the Narragansett Company for each year of the period of this contract together with the full details from which this loss was computed is shown on accompanying sheets.

# Loss to N. E. L. Co. Through Selling Electricity Under R. I. P. U. C. #68.

| * :     |      | K.W.H.<br>Measured<br>At East<br>Providence | . Unit Gen-<br>erating and<br>Delivery Cost | Total Gen-<br>erating and<br>Delivery Cost | Total<br>Capital<br>Cost | Total Cost<br>of Supplying<br>Service | Net Receipts From Attle- boro Co. Under R.I.P.U.C. No. 68 | Net Loss<br>To N.E.L.Co.<br>Under<br>R.I.P.U.C.<br>No. 68 |     |
|---------|------|---|---|--|--------------------------|---------------------------------------|---|---|-----|
| (9 Mo.) | 1918 | 3,224,946                                   | \$.0116998                                  | \$37,731.40                                | \$37,207.67              | \$74,939.07                           | \$36,158.03   | \$38,781.04   |     |
| ( mail  | 1919 | 5,060,860                                   | .0117977                                    | 59,706.74                                  | 43,672.50                | 103,379.24                            | 54,643.64   | 48,735.60   |     |
|         | 1920 | 5.929,570                                   | .0116329                                    | 68,978.36                                  | 48,998.05                | 117,976.41                            | 76,582.02   | 41,394.39   |     |
|         | 1921 | 5,767,848                                   | .00988456                                   | 56,012.60                                  | 58,438.12                | 114,450.72                            | 60,598.24   | 53,852.48   |     |
|         | 1922 | 7,411,960                                   | .0079967                                    | 59,271.23                                  | 72,090.17                | 131,361.40                            | 70,013.33   | 61,348.07   |     |
|         | 1923 | 10,171,600                                  | .0075348                                    | 76,640.90                                  | 66,111.78                | 142,752.68                            | 97,141.35   | 45,611.33   |     |
|         | 1924 | 10,800,000                                  | .0077798                                    | 84,021.84                                  | 70,437.08                | 154,458.92                            | 103,540.55  | 50,918.37   |     |
|         | 1925 | 11,890,800                                  | .0059444                                    | 70,726.47                                  | 77,573.02                | 148,299.49                            | 97,729.29   | 50,570.20   |     |
|         | 1926 | 13,091,771                                  | 44  | 77,822.72                                  | 85,405.52                | 163,228.24                            | 108,250.52  | 54,977.72   |     |
| ,       | 1927 | 14,414,040                                  | 44  | 85,682.82                                  | 94,026.79                | 179,709.61                            | 119,834.39  | 59,875.22   |     |
|         | 1928 | 15,869,858                                  | 66  | 94,336.78                                  | 103,528.51               | 197,865.29                            | 132,588.23  | 65,277.06   |     |
|         | 1929 | 17,472,714                                  | 64  | 103,864.80                                 | 113,984.09               | 217,848.89                            | 146,630.21  | 71,218.68   | 920 |
|         | 1930 | 19,237,458                                  | 46  | 114,355.15                                 | 125,485.22               | 239,840.37                            | 162,090.43  | 77,749.94   |     |
|         | 1931 | 21,180,441                                  | 44  | 125,968.61                                 | 138,160.31               | 264,128.92                            | 179,112,12  | 85,016.80   |     |
|         | 1932 | 23,319,666                                  | 66  | 138,621.42                                 | 152,119.42               | 290,740.84                            | 197,853.01  | 92,887.83   |     |
|         | 1933 | 25,674,952                                  | 44  | 152,622.18                                 | 167,490.94               | 320,113.12                            | 218,486.73  | 101,626.39  |     |
|         | 1934 | 26,268,122                                  | 41  | 168,037.02                                 | 184,404.68               | 352,441.70                            | 241,204.46  | 111,237.24  |     |
|         | 1935 | 31,123,202                                  |   | 185.008.76                                 | 203,021.55               | 388,030.31                            | 266,216.57  | 121,813.64  |     |
|         | 1936 | 34,266,645                                  | 44  | 203,694.64                                 | 225,529.05               | 427,223.69                            | 293,755.12  | 133,468.57  |     |
|         | 1937 | 37,727,576                                  | 66  | 224,267.80                                 | 246,109.50               | 470,377.30                            | 324,074.96  | 146,302.34  |     |
|         |      |   |   | \$2 197 272 24                             | 2 311 703 07             | ¢4 400 166 21                         | \$2 986 503.30  | \$1.512.662.91  |     |

\$2,187,372.24 \$2,311,793.97 \$4,499,166.21 \$2,986,503.30 \$1,512,662.91

923

# GENERATING AND DELIVERY COST

| 1918      | K.W.H.<br>Delivered | Unit<br>Price | Total<br>Cost |
|-----------|---------------------|---------------|---------------|
| April     | 301,613             | \$.011866     | \$3,578.94    |
| May       | 315,914             | .012124       | 3,830.14      |
| June      | 326,882             | .010932       | 3,573.47      |
| July      | 318,710             | .010537       | 3,358.25      |
| August    | 371,720             | .01041        | 3,869.61      |
| September | 367,419             | .01114        | 4,093.05      |
| October   | 416,989             | .012668       | 5,282.42      |
| November  | 403,011             | .013335       | 5,374.15      |
| December  | 402,688             | .0118488      | 4,771.37      |
|           | 3,224,946           |               | \$37,731.40   |

37,731.40 divided by 3,224,946 equals 0.0116998

|     |           | 5,060,860 |          | \$59,706.74 |
|-----|-----------|-----------|----------|-------------|
| 921 | December  | 564,301   | .0099555 | 5,617.90    |
| 921 | November  | 496,882   | .0108244 | 5,378.45    |
|     | October   | 507,849   | .0100485 | 5,103.12    |
|     | September | 454,194   | .0145894 | 6,626.42    |
|     | August    | 422,473   | .0098759 | 4,172.30    |
|     | July      | 368,710   | .0127328 | 4,694.71    |
|     | June      | 338,602   | .012118  | 4,103.18    |
|     | May       | 363,333   | .0144046 | 5,233.67    |
|     | April     | 359,570   | .0132913 | 4,748.70    |
|     | March     | 393,011   | .0132066 | 5,190.34    |
|     | February  | 367,312   | .0103457 | 3,800.10    |
|     | January   | 424,623   | .0118643 | \$5,037.85  |
|     | 1919      |           |          |             |

59,706.74 divided by 5,060,860 equals .0117977

# GENERATING AND DELIVERY COST

| 1920      | K.W.H.<br>Delivered | Unit<br>Price | Total<br>Cost |     |
|-----------|---------------------|---------------|---------------|-----|
| January   | 560,000             | \$.0093628    | \$5,243.17    |     |
| February  | 459,785             | .009663       | 4,442.90      |     |
| March     | 524,839             | .0112463      | 5,902.50      |     |
| April     | 493,011             | .0113506      | 5,595.97      |     |
| May       | 470,753             | .0145361      | 6,842.91      |     |
| June      | 484,516             | .0125891      | 6,049.26      |     |
| July      | 541,935             | .0128028      | 6,938.29      |     |
| August    | 381,935             | .0116881      | 4,464.09      |     |
| September | 528,602             | .0110769      | 5,855.27      |     |
| October   | 523,548             | .0106423      | 5,571.75      |     |
| November  | 486,022             | .0123178      | 5,986.72      | 926 |
| December  | 474,624             | .0128218      | 6,085.53      | 020 |
|           | 5,929,570           |               | \$68,978.36   |     |

\$68,978.36 divided by 5,929,570 equals \$.0116329

|           | 5,767,840 |          | \$56,012.60 |    |
|-----------|-----------|----------|-------------|----|
| December  | 620,900   | .0088218 | 5,477.46    |    |
| November  | 586,300   | .0087924 | 5,154.98    |    |
| October   | 578,100   | .0076922 | 4,446.86    |    |
| September | 498,300   | .0074255 | 3,700.13    | -  |
| August    | 453,900   | .0076296 | 3,463.08    | 92 |
| July      | 375,500   | .0086126 | 3,234.03    |    |
| June      | 416,500   | .0080243 | 3,342.12    |    |
| May       | 426,900   | .0113273 | 4,835.62    |    |
| April     | 447,900   | .0108434 | 4,856.76    |    |
| March     | 463,763   | .014999  | 6,955.98    |    |
| February  | 423,656   | .010796  | 4,573.87    |    |
| January   | 476,129   | .0124522 | \$5,971.71  |    |
| 1921      |           |          |             |    |

56,012.60 divided by 5,767,840 equals 00988456

Exhibit No. 10

# GENERATING AND DELIVERY COST

|     | 1922      | K.W.H.<br>Delivered | Unit<br>Price | Total<br>Cost |
|-----|-----------|---------------------|---------------|---------------|
|     | January   | 613,700             | \$.0084628    | \$5,193.62    |
|     | February  | 550,500             | .0089969      | 4,952.79      |
|     | March     | 599,360             | .0095218      | 5,706.99      |
|     | April     | 517,700             | .0105029      | 5,437.35      |
|     | May       | 521,700             | .0100840      | 5,260.82      |
|     | June      | 527,500             | .0096203      | 5,074.71      |
|     | July      | 449,700             | .0076202      | 3,426.80      |
|     | August    | 565,200             | .0069474      | 3,926.67      |
|     | September | 570,600             | .0069401      | 3,960.02      |
|     | October   | 733,400             | .0065339      | 4,791.96      |
| 929 | November  | 880,500             | .0064246      | 5,656.86      |
| 0-0 | December  | 882,100             | .0066689      | 5,882.64      |
|     |           | 7,411,960           |               | \$59,271.23   |

\$59,271.23 divided by 7,411,960 equals \$.0079967

# GENERATING AND DELIVERY COST

| 1923      | K.W.H.<br>Delivered | Unit<br>Price | Total<br>Cost |     |
|-----------|---------------------|---------------|---------------|-----|
| January   | 934,200             | .0070293      | \$6,566.77    |     |
| February  | 829,100             | .0069171      | 5,734.97      |     |
| March     | 872,500             | .0072709      | 6,343.86      |     |
| April     | 794,400             | .0083663      | 6,646.19      |     |
| May       | 795,800             | .0083186      | 6,619.94      |     |
| June      | 733,800             | .0073047      | 5,360.19      |     |
| July      | 704,100             | .0071113      | 5,007.07      |     |
| August    | 758,500             | .0070595      | 5,354.63      |     |
| September | 783,100             | .0074808      | 5,858.21      |     |
| October   | 979,500             | .0075158      | 7,361.73      |     |
| November  | 930,500             | .0075019      | 6,980.52      | 932 |
| December  | 1,056,100           | .008339       | 8,806.82      | 002 |
|           | 10,171,600          |               | \$76,640.90   |     |

\$76,640.90 divided by 10,171,600 equals \$.0075348

### 1924

Increase above unit cost of \$.0075348 by \$.000245 to allow for increased fuel cost of 1924 over 1923 equals a unit cost at East Providence Sub-Station for 1924 of \$.0077798.

The addition due to increased fuel cost is on the same basis as that shown in our Exhibit #1 corrected for a 2% loss between the generating station 933 and the East Providence Sub-Station.

Exhibit No. 10

# ESTIMATED GENERATING AND DELIVERY COST FOR 1925-1937

| \$60,463.91 | 10,171,600               |                                     | 352,195,227                  |              |             | 245,476.48         |                |                 | \$2,270,135.74                             |           |
|-------------|--------------------------|-------------------------------------|------------------------------|--------------|-------------|--------------------|----------------|-----------------|--|-----------|
| 7,276.21    | 1,056,100                | .0068897                            | 23,143,507                   | 136,309.27   | 74,854.46   | 15,926.48          | 61,454.81      | 108,395.62      | 169,850.43                                 | December  |
| 5,616.22    | 930,500                  | .0060357                            | 29,659,671                   | 149,357,30   | 97,004.43   | 20,639.24          | 52,352.87      | 140,491.30      | 192,844.17                                 | November  |
| 5,751.23    | 979,500                  | .0058716                            | 37,053,662                   | 180,509.91   | 122,580.18  | 26,080.89          | 57,929.73      | 183,505.14      | 241,434.87                                 | October   |
| 4,581.84    | 783,100                  | .0058509                            | 34,093,591                   | 165,384.13   | 115,057.69  | 24,480.36          | 50,326.44      | 170,628.11      | 220,954.55                                 | September |
| 4,223.56    | 758,500                  | .0055683                            | 38,764,576                   | 177,088.17   | 126,094.46  | 27,254.14          | 48,993.71      | 185,900.49      | 234,894.20                                 | August    |
| 4,015.48    | 704,100                  | .005703                             | 31,929,893                   | 150,166,45   | 105,248,65  | 22,393.33          | 44,917.80      | 150,214.46      | 195,132.26                                 | July      |
| 4,249.07    | 733,800                  | .0057905                            | 28,575,140                   | 136,890.24   | 93,754.47   | 19,947.76          | 43,135.77      | 137,021.16      | 180,156.93                                 | June      |
| 5,354.14    | 795,800                  | .006728                             | 21,272,191                   | 121,848.31   | 73,589.17   | 15,657.27          | 48,259.14      | 107,424.53      | 155,683.67                                 | May       |
| 5,288.00    | 794,400                  | .0066566                            | 19,781,234                   | 111,894.71   | 68,749.58   | 14,627.57          | 43,145.13      | 102,568.52      | 145,713.65                                 | April     |
| 5,045.93    | 872,500                  | .0057833                            | 27,946,094                   | 133,674.21   | 88,290,58   | 18,785.23          | 45,383,63      | 129,862.29      | 175,245.92                                 | March     |
| 4,514.53    | 829,100                  | .0054451                            | 30,176,069                   | 134,146.29   | 93,120.02   | 19,812.77          | 41,026.27      | 137,540.25      | 178,566.52                                 | February  |
| \$4,547.70  | 934,200                  | \$.0056302                          | 29,797,599                   | \$137,968.93 | \$93,395.77 | 19,871.44          | \$44,573.16    | \$135,185.41    | \$179,658.57                               | January   |
| HxI         | Attle-<br>boro<br>K.W.H. | Divided<br>By G<br>Plus One<br>Mill | Output<br>Of Plant<br>K.W.H. | C plus E     | Dx\$4.70    | Tons<br>of<br>Fuel | Balance<br>A—B | Cost of<br>Fuel | Total Gen-<br>erating and<br>Delivery Cost | Month     |
| J           | -                        | ΉH                                  | G                            | े जो         | [H]         | D                  | С              | В               | >  |           |
|             |                          |                                     |                              |              |             |                    |                |                 |  |           |

\$60,463.91 divided by 10,171,600 equals \$.0059444

All data other than the \$4.70 coal price and figures based thereon are for the year 1923

935

# FIXED CHARGES ON INVESTMENT CHARGEABLE TO THE ATTLEBORO STEAM & EECTRIC CO.

|      | A                                     | В                               | C<br>Depreciated  | D              | E            | F           |     |
|------|---------------------------------------|---------------------------------|---|----------------|--------------|-------------|-----|
| Year | Attleboro Demand Measured At E. Prov. | Unit Cost<br>of Gen-<br>erating | d Unit Cost<br>of Cables,<br>Transform-<br>ers, Duct<br>and Sub-Station | B<br>Plus<br>C | D x A        | E x 5 1/4 % |     |
| 1918 | 1,925                                 | \$77.53                         | \$16.11   | \$93.64        | \$180,257.00 | \$9,463.49  |     |
| 1919 | 2,266                                 | 81.46                           | 19.14   | 100.60         | 227,959.60   | 11,678.79   |     |
| 1920 | 2,654                                 | 81.05                           | 18.45   | 99.50          | 264,073.00   | 13,863.83   |     |
| 1921 | 2,580                                 | 108.79                          | 18.65   | 127.44         | 328,795.20   | 17,261.75   |     |
| 1922 | 3.318                                 | 109.33                          | 18.52   | 127.85         | 424,206.30   | 22,270.83   |     |
| 1923 | 3,600                                 | 88.81                           | 18.85   | 107.66         | 387,576.00   | 20,347.74   |     |
| 1924 | 3,840                                 | 89.15                           | 19.70   | 108.85         | 417,984.00   | 21,944.16   | 938 |
| 1925 | 4,229                                 | 89.15                           | 19.70   | 108.85         | 460,326.65   | 24,167.15   |     |
| 1926 | 4,656                                 | 89.15                           | 19.70   | 108.85         | 506,805.60   | 26,607.29   |     |
| 1927 | 5,126                                 | 44                              | 44  | 44             | 557,965.10   | 29,293.17   |     |
| 1928 | 5,644                                 | 64                              | 46  | 44             | 614,349.40   | 32,253.34   |     |
| 1929 | 6,214                                 | 44                              | 6.6   | 44             | 676,393.90   | 35,510.68   |     |
| 1930 | 6,841                                 | 44                              | 44  | 8.6            | 744,642.85   | 39,093.75   |     |
| 1931 | 7,532                                 | 66                              | 46  | 44             | 819,658.20   | 43,042.56   |     |
| 1932 | 8,293                                 | 68                              | 46  | 88             | 902,693.05   | 47,391.39   |     |
| 1933 | 9,131                                 | 64                              | 44  | 46             | 993,909.35   | 52,180.24   |     |
| 1934 | 10,053                                | 44                              | 44  | 64             | 1,094,269.05 | 57,449.12   |     |
| 1935 | 11,068                                | 54                              | 44  | 64             | 1,204,751.80 | 63,249.47   |     |
| 1936 | 12,186                                | 44                              | 66  | 64             | 1,326,446.10 | 69,638.42   |     |
| 1937 | 13,417                                | 64                              | 66  | 41             | 1,460,440.45 | 76,673.12   |     |

| FIXED CHARGES | on Inv | VESTMENT CH. | ARGEABLE | TO THE | ATTLEBORO | STEAM & | ELECTRIC Co. |
|---------------|--------|--------------|----------|--------|-----------|---------|--------------|
| G             | H      | I            | J        | K      | •         | M       | N            |

|     | Year | Trans-  | Depreciated<br>Value of<br>Transmission<br>Line | Fixed<br>Charges<br>On H<br>@ 7% | Total<br>Fixed<br>Charges<br>F Plus I | Total<br>Invest-<br>ment E<br>Plus H | Return<br>8%<br>of K | Corrected For Income Tax L Divided by 871/2% | Total<br>Capital<br>Cost<br>J Plus M |
|-----|------|---------|---|----------------------------------|---------------------------------------|--------------------------------------|----------------------|--|--------------------------------------|
|     | 1918 | \$36.25 | \$69,774.08                                     | \$4,884.19                       | \$14,347.68                           | \$250,031.08                         | \$20,002.49          | \$22,859.99                                  | \$37,207.57                          |
|     | 1919 | 30.49   | 69,081.22                                       | 4,835.69                         | 16,514.48                             | 297,040.82                           | 23,763.27            | 27,158.02                                    | 43,672.50                            |
|     | 1920 | 25.65   | 68,082.09                                       | 4,765.75                         | 18,629.58                             | 332,155.09                           | 26,572.41            | 30,368.47                                    | 48,998.05                            |
|     | 1921 | 26,69   | 68,854.55                                       | 4,819.82                         | 22,081.57                             | 397,649.75                           | 31,811.98            | 36,356.55                                    | 58,438.12                            |
|     | 1922 | 20.60   | 68,356.99                                       | 4,784.99                         | 27,055.82                             | 492,563.29                           | 39,405.06            | 45,034.35                                    | 72,090.17                            |
|     | 1923 | 17.77   | 63,981.96                                       | 4,478.74                         | 24,826.48                             | 451,577.96                           | 36,126.23            | 41,287.20                                    | 66,111.78                            |
|     | 1924 | 16,58   | 63,664.30                                       | 4,456.50                         | 26,400.66                             | 481,648.30                           | 38,531.86            | 44,036.42                                    | 70,437.08                            |
| 941 | 1925 | 44      | 70,116.82                                       | 4,908.18                         | 29,075.33                             | 530,443.47                           | 42,435.48            | 48,497.69                                    | 77,573.02                            |
|     | 1926 | 44      | 77,196.48                                       | 5.103.75                         | 32,011.04                             | 584,002.08                           | 46,720.17            | 53,394.48                                    | 85,405.52                            |
|     | 1927 | 44      | 84,989.08                                       | 5,949.24                         | 35,242.41                             | 642,954.18                           | 51,456.33            | 58,784.38                                    | 94,026.79                            |
|     | 1928 | 44      | 93,577.52                                       | 6,550.43                         | 38,803.77                             | 707,926.92                           | 56,634.15            | 64,724.74                                    | 103,528.51                           |
|     | 1929 | 44      | 103,028.12                                      | 7,211.97                         | 42,722.65                             | 779,422.02                           | 62,353.76            | 71,261.44                                    | 113,984.09                           |
|     | 1930 | 44.     | 113,423.76                                      | 7,939.66                         | 47,033.41                             | 858,065.63                           | 68,645.33            | 78,451.81                                    | 125,485.22                           |
|     | 1931 | 44      | 124,880.56                                      | 8,741.64                         | 51,784.20                             | 944,738.76                           | 75,579.10            | 86,376.11                                    | 138,160.31                           |
|     | 1932 | 44      | 137,497.94                                      | 9,624.86                         | 57,016.25                             | 1,040,190.99                         | 83,215.27            | 95,103.17                                    | 152,119.42                           |
|     | 1933 | 44      | 151,391.98                                      | 10,597.44                        | 62,777.68                             | 1,145,301.33                         | 91,624.11            | 104,713.26                                   | 167,490.94                           |
|     | 1934 | 44      | 166,687.40                                      | 11,668.12                        | 69,117.24                             | 1,260,956.45                         | 100,876.51           | 115,287.44                                   | 184,404.68                           |
|     | 1935 | 66      | 183,507.44                                      | 12,845.52                        | 76,094.99                             | 1,388,259.24                         | 111,060.74           | 126,926.56                                   | 203,021.55                           |
|     | 1936 | 44      | 202,043.88                                      | 14,143.07                        | 83,781.49                             | 1,528,489.98                         | 122,279.20           | 139,747.65                                   | 223,529.14                           |
|     | 1937 | **      | 222,453.86                                      | 15,571.77                        | 92,244.89                             | 1,682,894.31                         | 134,631.54           | 153,864.61                                   | 246,109.50                           |

943

# "GENERATING PLANT" DATA

| 1918          | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Peak<br>Primary<br>Load* | Unit<br>Cost |
|---------------|--|-----------------------------|---|--------------------------|--------------|
| April 1st     | \$2,622,405.65                           | \$102,924.89                | \$2,519,480.76  | 33,000 KW                | \$76.35      |
| May 1st       | 2,649,710.92                             | 109.378.58                  | 2,540,332.34  | 33,000 KW                | 76,98        |
| June 1st      | 2,661,584.79                             | 115,783.70                  | 2,545,801.09  | 33,000 KW                | 77.15        |
| July 1st      | 2,705,468.07                             | 123,903.26                  | 2.581,564.81  | 33,000 KW                | 78.23        |
| August 1st    | 2.706,504.62                             | 130,372.23                  | 2,576,132.39  | 33,000 KW                | 78.06        |
| September 1st | 2,707,809.00                             | 136,812.91                  | 2,570,996.09  | 33,000 KW                | 77.91        |
| October 1st   | 2,711,056.83                             | 143,273.56                  | 2,567,783.27  | 33.000 KW                | 77.81        |
| November 1st  | 2.713.519.13                             | 148,441.72                  | 2,565,077.41  | 33,000 KW                | 77.73        |
| December 1st  | 2,714,465.33                             | 154,872.20                  | 2,559,593.13  | 33,000 KW                | 77.56        |

<sup>\*</sup>Estimated. Peak primary loads were not taken prior to December, 1919.

944

Average Unit Cost \$77.53

# "GENERATING PLANT" DATA

|    | 1919          | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Peak<br>Primary<br>Load* | Unit<br>Cost |
|----|---------------|--|-----------------------------|---|--------------------------|--------------|
|    | January 1st   | \$2,870,901.10                           | \$160,705.08                | \$2,710,196.02  | 36,000 KW                | \$75.28      |
|    | February 1st  | 2,929,090.13                             | 167,951.92                  | 2,761,138.21  | 36,000 KW                | 76.70        |
|    | March 1st     | 2,925,868.39                             | 171,141.73                  | 2.754.726.66  | 36,000 KW                | 76.52        |
|    | April 1st     | 3,058,750.89                             | 178,594.48                  | 2,880,156,41  | 36,000 KW                | 80.00        |
|    | May 1st       | 3,061,296.11                             | 185,031.45                  | 2,876,266,66  | 36,000 KW                | 79.90        |
|    | June 1st      | 3,050,867.03                             | 179,252.77                  | 2,871,614.26  | 36,000 KW                | 79.77        |
|    | July 1st      | 3,060,551.99                             | 184,514.27                  | 2,876,037,72  | 36,000 KW                | 79.89        |
|    | August 1st    | 3,063,618.89                             | 190,677.93                  | 2,872,940.96  | 36,000 KW                | 79.80        |
|    | September 1st | 3,296,894.92                             | 182,879.70                  | 3,114,015.22  | 36,000 KW                | 86.50        |
|    | October 1st   | 3,330,371.32                             | 189,187,53                  | 3,141,183,79  | 36,000 KW                | 87.26        |
| 47 | November 1st  | 3,339,211.44                             | 195,883.00                  | 3,143,328.44  | 36,000 KW                | 87.31        |
|    | December 1st  | 3,394,089.04                             | 204,049.51                  | 3,190,039.53  | 36,000 KW                | 88.61        |
|    |               |  |                             |   |                          |              |

\*Estimated. Peak primary loads were not taken prior to December, 1919.

Average Unit Cost \$81.46

949

# "GENERATING PLANT" DATA

| 1920          | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Peak<br>Prima<br>Load | ry | Unit<br>Cost |     |
|---------------|--|-----------------------------|---|-----------------------|----|--------------|-----|
| January 1st   | \$3,407,893.40                           | \$210,095.31                | \$3,197,798.09  | 39,286 I              | KW | \$81.40      |     |
| February 1st  | 3,408,673.84                             | 216,704.90                  | 3,191,968.94  | 39,286                | 46 | 81.25        |     |
| March 1st     | 3,401,953.00                             | 230,189.51                  | 3,171,763.49  | 39,286                | 46 | 80.74        |     |
| April 1st     | 3,372,952.38                             | 228,149.15                  | 3,144,803.23  | 39,286                | 66 | 80.05        |     |
| May 1st       | 3,311,101.88                             | 229,126.86                  | 3,081,975.02  | 39,286                | 44 | 78.45        |     |
| June 1st      | 3,315,212.06                             | 234,786.40                  | 3,080,425.66  | 39,286                | 44 | 78.41        |     |
| July 1st      | 3,317,414.40                             | 241,656.10                  | 3,075,758.30  | 39,286                | 66 | 78.29        |     |
| August 1st    | 3,314,163.86                             | 227,940.83                  | 3,086,223.03  | 39,286                | 66 | 78.56        |     |
| September 1st | 3,538,254.47                             | 253,283.25                  | 3,284,971.22  | 39,286                | 44 | 83.62        |     |
| October 1st   | 3,552,531.21                             | 265,288.04                  | 3,287,243.17  | 39,286                | 66 | 83.67        |     |
| November 1st  | 3,583,621.79                             | 277,003.94                  | 3,306,617.85  | 39,286                | 44 | 84.17        | 950 |
| December 1st  | 3,589,481.63                             | 290,121.25                  | 3,299,360.38  | 39,286                | 44 | 83.98        | 000 |

Average Unit Cost \$81.05

# "GENERATING PLANT" DATA

|     | 10.24  | Book Value<br>of "Generat-   | Reserve for  | Depreciated<br>Book Value<br>of "Generat-  | Per<br>Prin  |    | Unit  |
|-----|--|--|--|--|--|----|---|
|     | 1921   | ing Plant"   | Depreciation   | ing Plant"   | Lo   |    | Cost  |
| 953 | January 1st February 1st March 1st April 1st May 1st June 1st July 1st August 1st September 1st October 1st November 1st | \$3,605,731.87<br>4,145,241.67<br>4,213,668.02<br>4,247,191.22<br>4,310,226.04<br>4,338,288.10<br>4,349,267.54<br>4,363,416.64<br>4,374,267.27<br>4,377,089.97<br>4,385,779.51 | \$302,705.81<br>321,424.94<br>334,868.69<br>349,007.73<br>359,125.06<br>373,665.74<br>387,892.45<br>406,145.39<br>423,488.16<br>444,358.34<br>462,336.32 | \$3,303,026.06<br>3,823,816.73<br>3,878,799.33<br>3,898,183.49<br>3,951,100.98<br>3,964,622.36<br>3,961,375.09<br>3,957,271.25<br>3,950,779.11<br>3,932,731.63<br>3,923,443.19 | 35,578<br>35,578<br>35,578<br>35,578<br>35,578<br>35,578<br>35,578<br>35,578<br>35,578<br>35,578 |    | \$92.84<br>107.48<br>109.02<br>109.57<br>111.05<br>111.43<br>111.34<br>111.23<br>111.05<br>110.54 |
|     | December 1st   | 4,387,206.72   | 486,625.03   | 3,900,581.69   | 35,578<br>35,578   | 48 | 110.28<br>109.63  |
|     |  |  |  |  |  |    |   |

Average Unit Cost \$108.79

### 955

### "GENERATING PLANT" DATA

| 1922          | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Per<br>Prim<br>Los | ary | Unit<br>Cost |     |
|---------------|--|-----------------------------|---|--------------------|-----|--------------|-----|
| January 1st   | \$5,309,842.69                           | \$520,601.10                | \$4,789,241.59  | 45,465             | KW  | \$105.34     |     |
| February 1st  | 5,566,541.95                             | 549,134.35                  | 5,017,407,60  | 45,465             | 44  | 110.36       |     |
| March 1st     | 5,577,871.67                             | 572,736.52                  | 5,005,135,15  | 45,465             | 66  | 110.09       |     |
| April 1st     | 5,581,510.94                             | 598,155.24                  | 4,983,355.70  | 45,465             | 66  | 109.61       |     |
| May 1st       | 5,589,751.18                             | 617,562.72                  | 4,972,188,46  | 45,465             | 46  | 109.36       |     |
| June 1st      | 5,597,738.29                             | 631,318.59                  | 4,966,419.70  | 45,465             | 68  | 109.24       |     |
| July 1st      | 5,624,205.93                             | 650,212.23                  | 4,973,993.70  | 45,465             | 45  | 109.40       |     |
| August 1st    | 5,630,165.91                             | 667,523.39                  | 4.962,642.52  | 45,465             | 44  | 109.15       |     |
| September 1st | 5,681,968.30                             | 685,623.64                  | 4,996,344.66  | 45,465             | 44  | 109.89       |     |
| October 1st   | 5,702,422.21                             | 702,625.26                  | 4,999,796.95  | 45,465             | 44  | 109.97       |     |
| November 1st  | 5,711,307.18                             | 715,290.15                  | 4,996,017.03  | 45,465             | 44  | 109.89       | 956 |
| December 1st  | 5,713,003.72                             | 727,864.83                  | 4,985,138.89  | 45,465             | 44  | 109.65       | 990 |

Average Unit Cost \$109.33

### "GENERATING PLANT" DATA

|     | 1923          | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Pea<br>Prima<br>Loa | ary | Unit<br>Cost |
|-----|---------------|--|-----------------------------|---|---------------------|-----|--------------|
|     | January 1st   | \$5,487,949.73                           | \$572,078.24                | \$4,915,871.49  | 55,000              | KW  | \$89.38      |
|     | February 1st  | 5,497,975.30                             | 584,520.70                  | 4,913,454.60  | 55,000              | 44  | 89.34        |
|     | March 1st     | 5,501,592,72                             | 596,873.46                  | 4,904,719.26  | 55,000              | 46  | 89.18        |
|     | April 1st     | 5,583,826,27                             | 610,384.24                  | 4,973,442.03  | 55,300              | 66  | 89.94        |
|     | May 1st       | 5,598,459.98                             | 623,108.55                  | 4,975,351.43  | 55,300              | 44  | 89.97        |
|     | June 1st      | 5,607,790.82                             | 609,430.49                  | 4,998,360.33  | 55,300              | 44  | 90.39        |
|     | July 1st      | 5,627,291.12                             | 622,328.47                  | 5,004,962.65  | 55,300              | 44  | 90.51        |
|     | August 1st    | 5,629,352.20                             | 637,931.04                  | 4,991,421.16  | 55,300              | 44  | 90.26        |
|     | September 1st | 5,626,089.14                             | 646,501.91                  | 4,979,587.23  | 55,300              | 44  | 90.05        |
|     | October 1st   | 5,624,050.27                             | 659,084.69                  | 4,964,965.58  | 55,300              | 64  | 89.78        |
| 959 | November 1st  | 5,626,123.95                             | 671,041.67                  | 4,955,082.28  | 55,300              | 64  | 89.60        |
| 000 | December 1st  | 5,628,876.60                             | 682,790.30                  | 4,946,086.30  | 63,970              | 44  | 77.32        |

Average Unit Cost \$88.8

### 961

### "GENERATING PLANT" DATA

| 1924          | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Pea<br>Prim<br>Los | ary | Unit<br>Cost |     |
|---------------|--|-----------------------------|---|--------------------|-----|--------------|-----|
| January 1st   | \$5,699,317.47                           | \$693,401.68                | \$5,005,915.79  | 63.970             | KW  | \$78.25      |     |
| February 1st  | 5,719,572.96                             | 705,265.38                  | 5,014,307.58  | 63,970             | 64  | 78.39        |     |
| March 1st     | 6,479,822.96                             | 716,804.05                  | 5,763,018.91  | 64,615             | 66  | 89.19        |     |
| April 1st     | 6,482,072.96                             | 731.211.60                  | 5,750,861.36  | 64,615             | 44  | 89.00        |     |
| May 1st       | 6,484,322.96                             | 745,588,75                  | 5.738.734.21  | 64,615             | 44  | 88.81        |     |
| June 1st      | 6,611,572.96                             | 759,935,59                  | 5,851,637.37  | 64,615             | 44  | 90.56        |     |
| July 1st      | 6,613,822.96                             | 774,564.68                  | 5.839,258.28  | 64,615             | 44  | 90.37        |     |
| August 1st    | 6,616,072.96                             | 789,162,83                  | 5.826,910.13  | 64,615             | 44  | 90.18        |     |
| September 1st | 6,618,322.96                             | 803,730.11                  | 5,814,592.85  | 64,615             | 66  | 89.99        |     |
| October 1st   | 6,620,572.96                             | 818,266.59                  | 5,802,306.37  | 64,615             | 68  | 89.80        |     |
| November 1st  | 6,622,822.96                             | 832,772.36                  | 5,790,050.60  | 64,615             | 66  | 89.61        | 962 |
| December 1st  | 7,675,072.96                             | 847,247.49                  | 6,827,825.47  | 64,615             | 66  | 105.67       | 002 |

Average Unit Cost \$89.15

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|     | Transformers<br>Cables   | 2             | X 1586<br>App.<br>X 1514<br>X 1586 | \$25,378.95<br>19,916.25<br>14,902.03<br>43,519.91 |  |
|-----|--|---------------|------------------------------------|--|--|
|     | Duct-48,780 ft. @ 50c  |               |                                    | 24,390.00  |  |
|     | Less Depreciation  | n             |                                    | \$128,107.14<br>5,028.43                           | \$123,078.71 divided by 10,800 equals \$11.40                  |
|     | Sub-Station, East Provid<br>Land, April 1, 1918<br>Structure April 1,<br>Equipment " " |               |                                    | 1,327.00<br>25,303.70<br>42,933.54                 |  |
| 965 | Less Street Lig  | hting         |                                    | \$69,564.24<br>16,842.13                           |  |
|     | Less Depreciation  | n             |                                    | \$52,722.11<br>2,904.92                            | \$49,817.19 divided by 10,800 less 220 or 10,580 equals \$4.71 |
|     | Estimated Total Load<br>Street Lighting Demand   | 10,800<br>220 | K.W.                               |  |  |
|     | Attleboro Load<br>Transmission Line<br>Less Depreciation                               | -,            | K.W.<br>K.W.                       | \$73,886.23<br>4,112.15                            |  |
|     |  |               |                                    | \$69,774.08  | divided by 1925 K.W. equals \$36.25                            |

| Transformers Cables  Duct—48,780 ft. @ 50c  | X 158<br>App<br>X 151<br>X 158 | 19,916.25<br>4 14,902.03           |  |     |
|---|--------------------------------|------------------------------------|--|-----|
| Less Depreciation   | 1                              | \$128,107.14                       | \$120,934.57 divided by 10,800 equals<br>\$11.20 |     |
| Sub-Station, East Provide<br>Land, 1/1/19<br>Structure. 1/1/19<br>Equipment, 1/1/19 | nce                            | 1,327.00<br>25,537.30<br>69,092.63 |  |     |
| Less Street Lighting  |                                | \$95,956.93<br>16,842.13           |  | 968 |
| Less Depreciation   |                                | \$79,114.80<br>5,138.03            | \$73,976.77 divided by 10,580 equals \$7.94      |     |
| Estimated Total Load<br>Street Lighting Demand                                      | 10,800 K.W                     | 7.                                 |  |     |
| Attleboro Load<br>Transmission Line<br>Less Depreciation                            | 10,580 K.W<br>2,266 K.W        |                                    |  |     |
|   |                                | \$69,081.2                         | 2 divided by 2,266 K.W. equals \$30.49           |     |

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|     | Transformers<br>Cables<br>Duct—48780 ft @ 50c   | X 1586<br>App.<br>X 1514<br>X 1586 | \$25,378.95<br>19,916.25<br>14,902.03<br>43,519.91<br>24,390.00 |  |
|-----|---|------------------------------------|---|--|
|     | Less Depreciation   |                                    | \$128,107.14<br>7,891.50  | \$120,215.64 divided by 10,800 equals<br>\$11.13 |
| 084 | Sub-Station, East Provident<br>Land, 1/1/20<br>Structure, 1/1/20<br>Equipment, 1/1/20 | ce                                 | 1,327.00<br>25,748.05<br>73,803.77                              |  |
| 971 | Less Street Lighting  |                                    | \$100,878.82<br>16,842.13                                       |  |
|     | Less Depreciation   |                                    | \$84,036.69<br>6,590.11   | \$77,446.58 divided by 10,580 equals<br>\$7.32   |
|     |   | 800 K.W.                           |   | 91.32  |
|     |   | 580 K.W.<br>554 K.W.               | 73,886.23<br>5,804.14   |  |
|     |   |                                    | \$68,082.09   | divided by 2,654 K.W. equals \$25.65             |

| Transformers   | X 1586<br>X 1621                   | \$25,378.95<br>16,230.84                                      |  |     |
|--|------------------------------------|---|--|-----|
| Cables  Duct—60,975 ft. @ 50c  | App.<br>X 1514<br>X 1536<br>X 1621 | 19,916.25<br>14,902.03<br>43,519.91<br>22,687.65<br>30,487.50 |  |     |
| Less Depreciation  |                                    | \$173,123.13<br>14,545.99                                     | \$158,577.14 divided by 13,000 equals<br>\$12.20 |     |
| Sub-Station, East Providence<br>Land, 1/1/21<br>Structure, 1/1/21<br>Equipment, 1/1/21 |                                    | 1,327.00<br>25,757.05<br>78,266.49                            |  | 974 |
| Less Street Lighting   |                                    | \$105,350.53<br>16,842.13                                     |  |     |
| Less Depreciation  |                                    | \$88,508.40<br>6,020.04                                       |  |     |
|  |                                    | \$82,488.36   | divided by 12,780 equals \$6.45                  |     |
|  | 00 K.W.                            |   |  |     |
|  | 80 K.W.<br>80 K.W.                 | \$73,886.23<br>5,031.68                                       |  |     |
|  |                                    | \$68,854.55   | divided by 2,580 K.W. equals \$26.69             |     |

### 

|     | Transformers   | X 1586                                       | \$25,378.95  |                                 |                    |
|-----|--|--|--|---------------------------------|--------------------|
|     | Cables  Duct-60,975 ft. @ 50c  | X 1621<br>App.<br>X 1514<br>X 1586<br>X 1621 | 16,230.84<br>19,916.25<br>14,902.03<br>43,519.91<br>22,687.65<br>30,487.50 |                                 |                    |
|     | Less Depreciation  |  | \$173,123.13<br>16,989.46  | \$156,133.67 divided<br>\$12.01 | by 13,000 equals   |
| 977 | Sub-Station, East Providence<br>Land, 1/1/22<br>Structure, 1/1/22<br>Equipment, 1/1/22 |  | 1,793.15<br>25,748.05<br>79,242.83   |                                 |                    |
|     | Less Street Lighting   |  | \$106,784.03<br>16,842.13  |                                 |                    |
|     | Less Depreciation  |  | \$89,941.90<br>6,770.49  | \$83,171.41 divided<br>\$6.51   | by 12,780 equals   |
|     | Estimated Total Load 13,00<br>Street Lighting Demand 22                                | 00 K.W.                                      |  |                                 |                    |
|     |  | 80 K.W.<br>8 K.W.                            | 73,886.23<br>5,529.24  |                                 |                    |
|     |  |  | \$68,356.99  | divided by 3,318 K.             | .W. equals \$20.60 |

| 3—5,000 K.V.A. Transformers X 1621<br>X 1586<br>5—Cables X 1514<br>X 1586<br>X 1621<br>X 2540<br>Duct—60,975 feet @ 50c | 25,378.95<br>14,902.03<br>43,519.91<br>22,687.65                           |
|---|--|
| Less Depreciation   | \$171,622.06<br>17,902.59 \$153,719.47 divided by 13,000 equals<br>\$11.82 |
| Sub-Station, East Providence<br>Land, 1/1/23<br>Structure, 1/1/23<br>Equipment, 1/1/23                                  | \$1,793.15<br>25,757.05<br>89,657.24 <b>980</b>                            |
| Less Street Lighting  | \$117,207.44<br>16,842.13  |
| Less Depreciation   | \$100,365.31<br>10,459.94  |
|   | \$89,905.37 divided by 12,780 equals \$7.03                                |
| Transmission Line Less Depreciation   | \$73,886.23<br>9,904.27  |
|   | \$63,981.96 divided by 3,600 K.W. equals \$17.77 per KW                    |

### 

|     | 3—5,000 K.V.A. Transformers X 1621<br>X 1586<br>X 1514<br>X 1586<br>X 1621<br>X 2540<br>Duct—60,975 feet @ 50c          | \$16,230.84<br>25,378.95<br>14,902.03<br>43,519,91<br>22,687.65<br>18,415.18<br>30,487.50 |  |
|-----|---|---|--|
|     | Less Depreciation   | \$171,622.06<br>20,869.24   | \$150,752.82 divided by 13,000 equals<br>\$11.60 |
|     | Sub-Station, East Providence<br>Land, Book Value 3/1/24<br>Structure, Book Value 3/1/24<br>Equipment, Book Value 3/1/24 | \$1,793,15<br>28,487.58<br>104,447.92   |  |
| 983 | Less Street Lighting, Land,<br>Building & Equipment   | \$134,728.65<br>16,886.52   |  |
|     | Less Depreciation   | \$117,842.13<br>14,329.60   | \$103,512.53 divided by 12,780 equals \$8.10     |
|     | Estimated Total Load 13,000 K.W. Street Lighting Demand 220 "   |   |  |
|     | 12,780 K.W.<br>Attleboro Load 3,840 K.W.  |   |  |
|     | Transmission Line X 1595, N. E. L. C<br>share only<br>Less Depreciation   | \$73,886.23<br>10,221.84  |  |
|     |   | \$63,664.39   | divided by 3,840 KW equals \$16.58               |

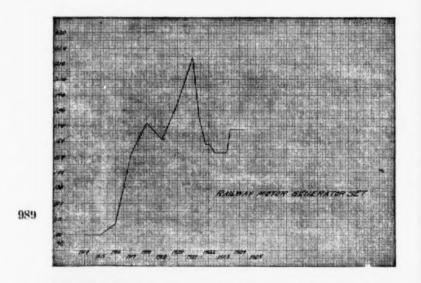
### RECEIPT FROM ATTLEBORO STEAM & ELECTRIC CO. UNDER R. I. P. U. C. #68.

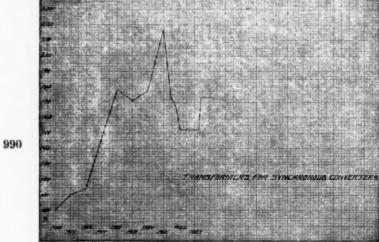
|           | Year | K.W.H.<br>Measured<br>at Attleboro | Base<br>Rate | Average<br>Coal<br>Cost | Net Rate<br>Per KWH | Total<br>Annual<br>Charges | Amount of Su<br>Station &<br>Line Rental<br>Charges | b- Net<br>Receipts<br>From<br>Attleboro Co. |     |
|-----------|------|------------------------------------|--------------|-------------------------|---------------------|----------------------------|---|---|-----|
| (9 Mo.)   |      | 2,999,200                          | \$.00857     | \$9.49*                 | .013666*            | \$40,988.96                | \$4,830.93  | \$36,158.03                                 |     |
| ( > 210.) | 1919 | 4,706,600                          | 11           | 8.69*                   | .0129796*           | 61,084.89                  | 6,441.25  | 54,643.64                                   |     |
|           | 1920 | 5,514,500                          | 44           | 11.13*                  | .0150554*           | 83,023.27                  | 6,441.25  | 76,582.02                                   |     |
|           | 1921 | 5,364,099                          | 66           | 12.05**                 | .015839*            | 67,039.49                  | 6,441.25  | 60,598.24                                   |     |
|           | 1761 | 0,001,077                          |              | 7.80                    | .012225             |                            |   |   |     |
|           | 1922 | 6,893,123                          | 44           | 7.80**                  | .012225             | 76,454.58                  | 6,441.25  | 70,013.33                                   |     |
|           | 1766 | 0,070,120                          |              | 6.05                    | .01070735           |                            |   |   |     |
|           | 1923 | 9,459,588                          | 44           | 6.05**                  | .01070735           | 103,582.60                 | 6,441.25  | 97,141.35                                   |     |
|           | 1723 | 2,402,000                          |              | 6.30                    | .01095              |                            |   |   |     |
|           | 1924 | 10,044,000                         | 44           | 6.30                    | .01095              | 109,981.80                 | 6,441.25  | 103,540.55                                  | 986 |
|           | 1925 | 11,058,444                         | 46           | 4.50                    | .00942              | 104,170.54                 | 6,441.25  | 97,729.29                                   | 960 |
|           | 1926 | 12,175,347                         | 44           | 44                      | ,00942              | 114,691.77                 | 6,441.25  | 108,250.52                                  |     |
|           | 1927 | 13,405,057                         | 46           | 44                      | .00942              | 126,275.64                 | 6,441.25  | 119,834.39                                  |     |
|           | 1928 | 14,758,968                         | 44           | 44                      | 44                  | 139,029.48                 | 6,441.25  | 132,588.23                                  |     |
|           | 1929 | 16,249,624                         | 46           | 44                      | 44                  | 153,071.46                 | 46  | 146,630.21                                  |     |
|           | 1930 | 17,890,836                         | 45           | 44                      | 44                  | 168,531.68                 | 44  | 162,090.43                                  |     |
|           | 1931 | 19,697,810                         | 66           | 44                      | 66                  | 185,553.37                 | 44  | 179,112.12                                  |     |
|           | 1932 | 21,687,289                         | 64           | 66                      | 44                  | 204,294.26                 | 44  | 197,853.01                                  |     |
|           | 1933 | 23,877,705                         | 66           | 44                      | 46                  | 224,927.98                 | 46  | 218,486.73                                  |     |
|           | 1934 | 26,289,353                         | 61           | 44                      | 64                  | 247,645.71                 | 48  | 241,204.46                                  |     |
|           | 1935 | 28,944,578                         | 64           | 64                      | 46                  | 272,657,92                 | 44  | 266,216.67                                  |     |
|           | 1936 | 31.867,980                         | 66           | 6-6                     | 41                  | 300,196.37                 | 46  | 293,755.12                                  |     |
|           | 1937 | 35,086,646                         | 64           | 44                      | 44                  | 330,516.21                 | 46  | 324,074.96                                  |     |

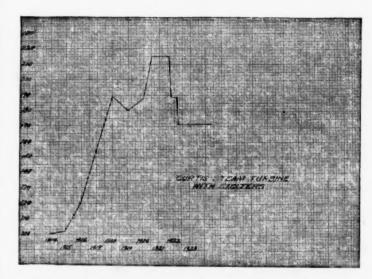
<sup>\*</sup>Average for year.

<sup>\*\*</sup>To April 1st.

Exhibit No. 11







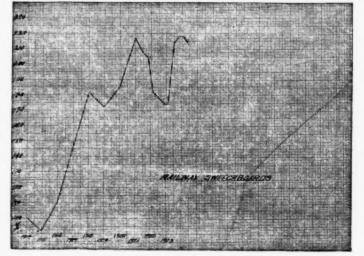
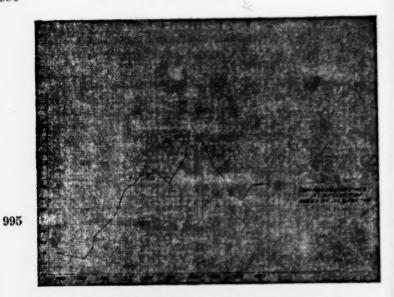


Exhibit No. 11





APRIL'14, 1923

# Construction **Trend of Electrical**

and Power Construction Work During Past Twelve Years-Index Price Fluctuations of Major Items Composing Electric Light Curves Facilitate Estimates of Past and Future Construction

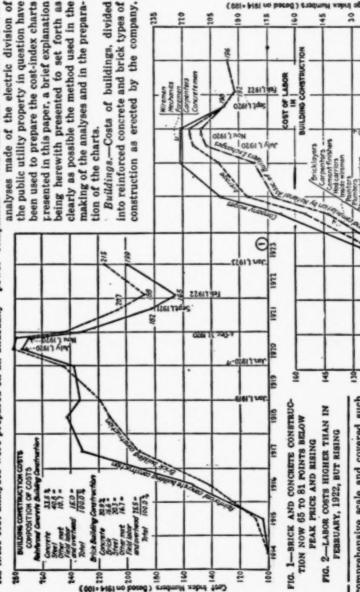
By WILLIAM W. HANDY Consulting Engineer, Baltimore, Md.

a rather unusually elaborate set of cost analyses of construction work, involving the determination of the relative costs of the several major elements making up the totals of various capital accounts, together with the unit costs of all of these elements and the percentage fluctuations in these costs over a period of years from 1911 to 1922 inclusive. During this period, as is well known, prices rose from the pre-war normal level to the war and author of this paper in the last three years, covering the property of a large gas and electric light and power public utility company in the Middle Atbeen on the average increasing to a greater or less extent during the year 1922, with the exception of equipment generally, the price trend of which has been down-CONNECTION with a valuation made by the landic States, there was occasion for the preparation of post-war peaks, and subsequently fell to the minimum post-war level in 1921, from which in turn they have

As these cost analyses were prepared on an unusually

appeared that the trend of construction costs could be continued and a record made which would be of permanent value through future years. While information similar to this is available in the form of the well-known cost indexes published by the United States Department of Labor and by the Bradstreet and Dun organizations and others, and while certain manufacturing and construction companies also maintain such records for the apparatus which they manufacture and for the work which they do, it appears that there is no similar service in effect especially applicable to public utility properties such as those of electric light and power companies. With this end in view the cost as a whole, including buildings, power-plant and substation equipment, distribution system and all other items, including customers' installations. Furthermore, by the periodic posting of these index numbers and charts it material factors entering into the construction of a property and the price trend of each different kind of construction work, together with the price trend of the property

being herewith presented to set forth as clearly as possible the method used in the making of the analyses and in the prepara-



bers and cost-index charts which would be of value to the industry and which would make it possible to tell at a glance an extended period, it appeared that they afforded an excellent opportunity the price trend of all major labor and comprehensive scale and covered such for the preparation of cost-index num-

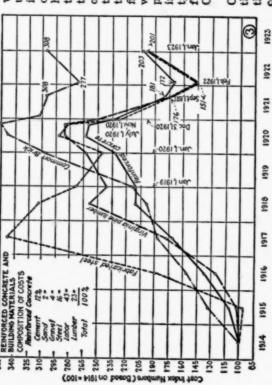
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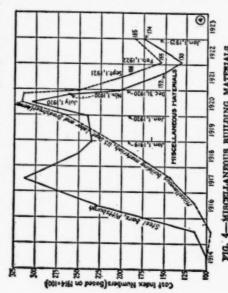
5



WORLD



ALL BUILDING MATERIALS BRICK HAS REDUCED LEAST 0 710.



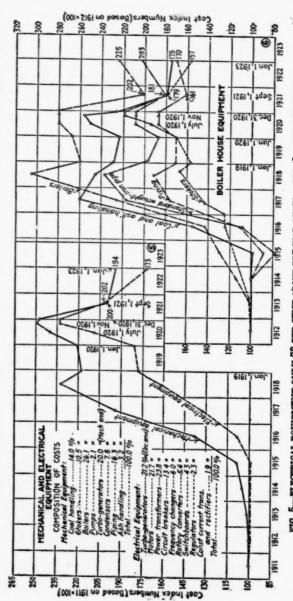
LLANDOUS BUILDING 10.

head costs. The percentage of each of these elements to the total costs was de-termined, together with the percentage of fluctuations in unit costs of each of these elements over the period from 1911 were separated into the elements making up the cost, comprising cost of concrete in place, brick delivered, steel delivered, other materials and field labor and overto 1922 inclusive. Weighted percentage fluctuations in the costs of these elements were then figured, the total of the weighted ing the cost-index numbers of the two types of construction over the period, and from these the index curves as shown on Chart I were prepared. percentages plus a base figure of 100 giv-

the unit costs of reintorces which the various elements entering into it were the various elements entering fluctuations ompiled and the percentage fluctuations in the unit costs of these elements from 1911 to 1922 inclusive determined, the same analyses being made of the costs of brick, strucwas made, detailed analyses of Supporting the analyses from Chart

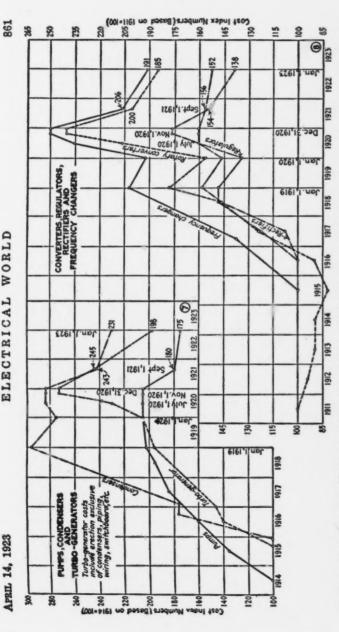
tural steel, miscellaneous building material and the various kinds of field labor entering into building construction. The cost-index curves prepared from these analyses are shown on Charts 2, 3 and 4.

equipment as a whole entering into the total cost of power stations was prepared in a manner similar to the analysis made of building costs, the relative cost of each element, such as boilers, turbo-generators (mechanical end), piping, coal and ash handling, stokers and auxiliaries, condensers and tubes and pumps, and the percentage of each of these to the total cost, determined, together with the actual and weighted percentage fluctuations in the unit costs of these same elements from 1911 to 1922 inclusive, the total of the weighted percentages giving the fluctuations in the costs of mechanical mechanical equipment as a whole over the period, from which the ot Mechanical Equipment.—An analysis



STOKER F16. -blectrical equipment only 78 per cent above pre-war level. More reduced than boiler F1G. 6





-FREQUENCY fig. 7—TURBO-GENERATORS 72 POINTS BELOW PEAK PRICE; CONDÊNSERS 131 POINTS ABOVE 1914 PRICES. FIG. 8-CHANGERS STILL 91 PER CENT ABOVE PRE-WAR LEVEL; RECTIFIERS ONLY 38 PER CENT ABOVE

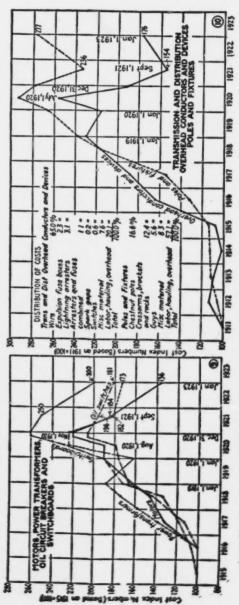
index-cost curve shown on Chart 5 was prepared, the cost index curves for boilers and the other elements of mechanical equipment being illustrated in the curves of Charts 6 and 7.

made for mechanical equipment was made for electrical and for mechanical equipment was made for electrical equipment entering into the total cost of generating stations and substations, relative cost determined of each element such as turbo-generators (electrical end), motors, power transformers, switchboards, induction pregulators and constant-current transformers and rectinifers, and the percentage of each of these to the total fors, and the percentage of each of these to the total cost, together with the actual and weighted percentage fuctuations in these same elements from 1911 to 1922 the fluctuations in the cost of electrical equipment as a whole over the period, from which the index cost curve flabowm on Chart 5 was prepared, the cost-index curves a

for frequency changers, and the other elements of electrical equipment being shown in the curves plotted in

Charts 8 and 9.

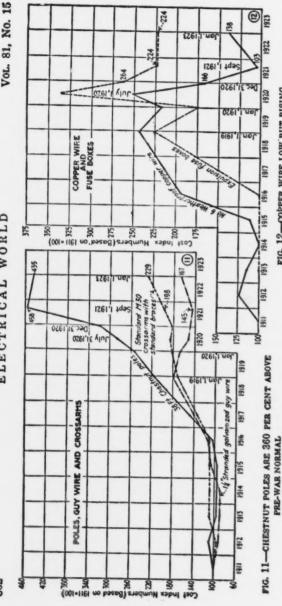
Poles and Fixtures.—Cost analyses of poles and fixtures were made similarly to the analyses of buildings and mechanical and electrical equipment. The relative costs of chestnut poles, cross-arms, braces and racks, guys, miscellaneous material, labor, hauling and overhead costs, and the percentage of these to the total cost, were determined, together with the actual and weighted percentage fluctuations in the costs of these same elements from 1911 to 1922 inclusive, the total of the weighted percentages giving the fluctuations in the cost of poles and fixtures as a whole over the period in question, from which the cost-index curve shown on Chart 10 was prepared, the index curves for poles, cross-arms and other elements entering into the cost of poles and fixtures being shown in the curves composing Charts 11 and 16.



-POLES AND rig. 10 STILL 100 PER CENT UP, BUT MOTORS SHOW GREATER REDUCTION. \PIXTURES NEAR PEAK PRICES; CONDUCTORS LOW BUT RISHO OIL SWITCHES



### WORLD ELECTRICAL

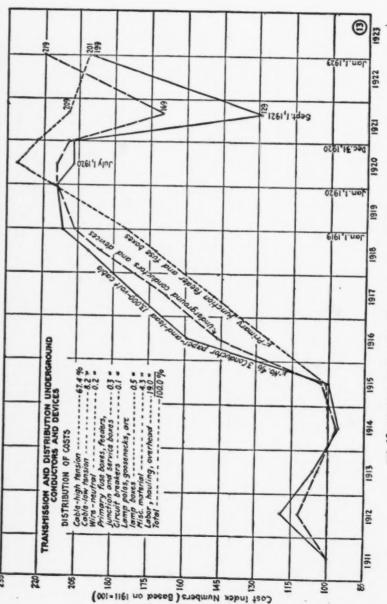


COPPER WIRE LOW BUT RISING FIG. 12-

formers, arc and glower lamps and customers' electric installation, the cost-index curves for these being shown on Charts 10, 13, 14 and 15 and the cost-index curves for copper wire, underground cable and the other elements entering into the costs of the above several kinds of construction being shown on Charts 12, 13 and 16.

Total Construction and Equipment.—Finally a cost Similar analyses to that made of poles and fixtures were also made of overhead conductors and devices, under-ground conductors, municipal street lighting, customers' services, electric house meters, distribution or line trans-Other Capital Accounts or Kinds of Construction.

obtaining capital, etc., and the relative cost was determined of each element entering into the total, including buildings and structures, mechanical equipment, electrical equipment, poles and fixtures, overhead conductors and devices, underground conductors, line transformers, arc lamps, municipal street lighting, customers' services, customers' meters and customers' installation, the actual percentage fluctuations in each of these elements for the analysis was made of the property as a whole, including all construction and equipment, but exclusive of land, unfinished plant investment, working capital and intangibles, such as organization and development, cost of

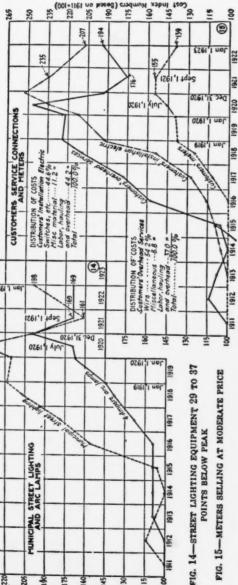


-UNDERGROUND EQUIPMENT NEAR PEAK PRICES AND RISING FIG. 13-



APRIL 14, 1923





utility such as the one in question rose from the prewar level in 1911 to a maximum in July, 1920, decreased from this date through the latter part of 1920 and through 1921 up to September, and from that date has been slowly rising through the past year to Jan. 1, 1923, as of which date the analyses were completed and at which time the cost index was 194, showing an increase over the pre-war period of 94 per cent. period being taken from the analyses already made and the weighted percentage fluctuations being calculated therefrom, the total of the weighted percentages giving the fluctuations in the cost of construction and equipment as a whole from 1911 to 1922 inclusive, from which the cost-index curve for the entire property shown on Chart 17 was prepared. From this chart it will be noted that the cost index for a large electric light and power

## DERIVATION OF INDEX FIGURES

the method used and its application in deriving the cost-index figures from which the charts presented in this paper were derived, the table on page 864 gives the derivation of the indexes for total construction and equipment. By reference to this tabulation it will be For the purpose of illustrating still more effectively

of construction, including buildings and structures, mechanical equipment, electrical equipment, poles and fixtures, overhead conductors and devices, underground gives the actual costs under each capital account covering its particular kind noted that the upper part of it

conductors, and so on down to customers' installation, together with the percentage each of these sub-totals bears to the total of all construction and equipment.

The lower part of the tabulation gives for each capital account the percentage fluctuation in cost for its particular kind of construction from 1911 to 1922 inclusive, together with the weighted percentage fluctuations in cost for each by years, the latter being derived the manifest of the construction from the derived the manifest of the construction from the derived the manifest of the construction from the mental derived the manifest of the construction from the construction of the construction from the construction from the construction of the construc by multiplying its percentage of the total cost of all construction and equipment by the actual percentage fluctuations, the actual percentages having been first of each kind of construction—such, for example, as buildings and structures, which was made up from an analysis of the unit costs and percentage fluctuations in derived from similar tabulations giving the cost analyses of each kind of construction—such, for example, as (sand, gravel, cement, brick, structural steel, lumber, etc.) various kinds of building labor.

tures, mechanical equipment, electrical equipment, etc., for each year were taken, giving the percentage fluctuations in cost for construction Again referring to the tabulation, the sums of the weighted percentages of buildings and strucand equipment as a whole over the period, from

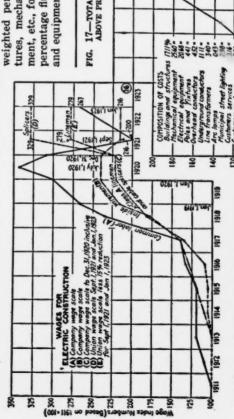
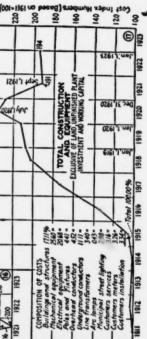
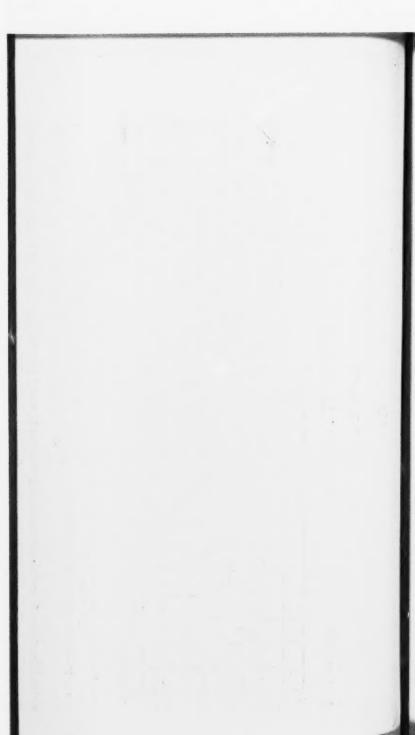


FIG. 16—WAGES OF CASILE SPLICERS AND LINEMEN 179 TO 229 POINTS ABOVE PRE-WAR AVERAGE

CENT 17-TOTAL CONSTRUCTION COST 94 PER ABOVE PRE-WAR BASIS, BUT RISING SLOWLY





| CONDENSED SUMMARY OF ANALYSES OF ACTUAL COSTS OF TOTAL CONSTRUCTION AND EQUIPMENT (ELECTRIC DIVISION OF TOTAL COSTS OF TOTAL CONSTRUCTION AND EQUIPMENT (ELECTRIC DIVISION OF TOTAL COSTS |
|---|
|---|

| Buildin    | ga .        | Mechani<br>Equipme | ent         | Electric<br>Equipme |             | Poles a<br>Fixtur | nd<br>es    | Overhe<br>Conduct | ad<br>eroi  | Undergro<br>Conduct | und<br>ors | Lin       | rmers | Are L     | amps | Munic<br>Street Li | ipal<br>ghting | Custon    |      | Custon    |      | Custon   | ners' |             |       |
|------------|-------------|--------------------|-------------|---------------------|-------------|-------------------|-------------|-------------------|-------------|---------------------|------------|-----------|-------|-----------|------|--------------------|----------------|-----------|------|-----------|------|----------|-------|-------------|-------|
| Cost       | Per<br>Cent |                    | Per<br>Cent |                     | Per<br>Cent |                   | Per<br>Cent |                   | Per<br>Cent |                     | Per        | Cost      | Per   | Cost      | Per  | Coet               | Per            | Cost      | Per  | Cont      | Per  | 0.       | Per   | Total       | 1 Per |
| \$4,029,41 | 17.[]       | \$6,029,672        | 25.60       | \$4,870,037         | 20.68       | \$1,039,137       | 4.41        | \$1,061,303       | 4.52        | \$2,625,865         | 11.11      | \$800,318 | 3.40  | \$101,939 | 0.43 | \$702,890          | 2.98           | \$744,332 | 3.16 | \$767,251 | 3.26 | 4786 516 | 3 34  | #23,558,671 | Cent  |

PERCENTAGE OF COST FLUCTUATION BASED ON STUDY OF PRICE FLUCTUATIONS IN MATERIAL AND LABOR

|  | Buile                           | dings  | Mochi<br>Equip  | anical<br>ment   | Elec<br>Equip   | trical<br>pment  | Poles<br>Fixta   |  | Over   | head<br>ictors  |  | ground<br>uctors  |   | ne<br>ners  | Lan   |  | Muni-<br>Stre<br>Light  | et   | Custo  |   | Cuato  | mers'  | Custon  | mers'   | To   | tals  |
|--|---------------------------------|--|---|--|---|--|--|--|--|---|--|---|---|---|---|--|---|--|--|---|--|--|---|---|--|---|
| Date of Construction   | Actual                          | Weighted   | Actual  | Weighted   | Actual  | Weigh ed   | Actual   | Weighted   | Astual   | Weighted  | Actual   | Weighted  | Actual  | Weighted  | Actual  | Weighted   | Actual  | Weighted   | Aetual   | Weighted  | Letual   | Veighted   | Letual  | Veighted  | ctual  | reighted  |
| 1911<br>1912<br>1913<br>1914<br>1915<br>1916<br>1917<br>1918<br>Jan. 1, 1919<br>Jan. 1, 1920<br>July 1, 1920<br>Dec. 31, 1920<br>Sept. 1, 1921<br>Jan. 1, 1921 | 175.0<br>136.0<br>88.0<br>103.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.9<br>8.6<br>20.9<br>22.9<br>22.1<br>24.0<br>29.9<br>23.3<br>15.1<br>17.6 | 0.0<br>0.0<br>4.0<br>8.0<br>38.0<br>94.0<br>132.0<br>118.7<br>121.0<br>147.0<br>100.0<br>94.0 | 0.0<br>0.0<br>0.0<br>1.0<br>2.0<br>9.7<br>24.1<br>33.8<br>30.2<br>31.0<br>35.8<br>37.6<br>25.6<br>24.1 | 0.0<br>0.0<br>-1.0<br>-1.0<br>10.0<br>33.0<br>62.0<br>79.0<br>81.0<br>109.0<br>133.0<br>102.0<br>73.0 | 0.0<br>0.0<br>-0.2<br>-0.2<br>-0.2<br>-0.2<br>16.8<br>12.8<br>16.3<br>16.3<br>16.3<br>16.3<br>16.3 | 0.0<br>7.0<br>12.0<br>12.0<br>32.0<br>32.0<br>55.0<br>116.0<br>139.0<br>165.0<br>194.0<br>178.0<br>136.0 | 0.0<br>0.3<br>0.5<br>0.5<br>0.6<br>1.4<br>2.4<br>5.1<br>6.1<br>7.3<br>8.6<br>7.8<br>6.0<br>7.8 | 0.0<br>16.0<br>10.0<br>1.0<br>8.0<br>64.0<br>88.0<br>117.0<br>131.0<br>119.0<br>91.0<br>54.0<br>76.0 | 0.0<br>0.7<br>0.5<br>0.0<br>0.4<br>2.9<br>4.0<br>5.3<br>5.9<br>5.4<br>7.1<br>4.1<br>2.4 | 0.0<br>14.0<br>5.0<br>-1.0<br>3.0<br>47.0<br>69.0<br>95.0<br>108.0<br>115.0<br>116.0<br>110.0<br>69.0<br>120.0 | 0.0<br>1.6<br>0.6<br>-0.1<br>0.3<br>5.2<br>7.7<br>10.6<br>12.0<br>12.8<br>12.9<br>12.2<br>7.7<br>13.3 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>8.0<br>46.0<br>58.0<br>46.0<br>76.0<br>54.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.3<br>1.6<br>2.0<br>1.6<br>2.0<br>2.6<br>1.8 | 0.0<br>0.0<br>9.0<br>9.0<br>9.0<br>9.0<br>9.0<br>44.0<br>67.0<br>69.0<br>99.0<br>69.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.1<br>0.2<br>0.3<br>0.3<br>0.4 | 0.0<br>15.0<br>8.0<br>0.0<br>6.0<br>55.0<br>79.0<br>106.0<br>119.0<br>117.0<br>137.0<br>100.0<br>61.0<br>98.0 | 0.0<br>0.4<br>0.2<br>0.0<br>0.2<br>1.6<br>2.4<br>3.2<br>3.5<br>3.5<br>4.1<br>3.0<br>1.8<br>2.9 | 0.0<br>13.0<br>8.0<br>2.0<br>8.0<br>56.0<br>79.0<br>110.0<br>124.0<br>123.0<br>147.0<br>94.0<br>76.0<br>94.0 | 0.0<br>0.4<br>0.3<br>0.1<br>0.3<br>1.8<br>2.5<br>3.5<br>3.9<br>4.6<br>3.0<br>2.4<br>3.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>12.0<br>27.0<br>39.0<br>40.0<br>46.0<br>55.0<br>39.0 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.4<br>0.9<br>1.3<br>1.5<br>1.8<br>1.8 | 0.0<br>0.0<br>0.0<br>4.0<br>9.0<br>17.0<br>28.0<br>54.0<br>92.0<br>112.0<br>133.0<br>151.0<br>107.0 | 0.0<br>0.0<br>0.0<br>0.1<br>0.3<br>0.6<br>0.9<br>1.8<br>3.1<br>3.7<br>4.4<br>5.0<br>4.5 | 0.0<br>3.4<br>1.9<br>1.4<br>4.8<br>33.9<br>72.5<br>101.7<br>106.6<br>111.6<br>113.7<br>128.3<br>90.5 | 0.0<br>3.4<br>1.9<br>1.4<br>4.8<br>33.9<br>72.5<br>101.7<br>106.6<br>111.6<br>1133.7<br>128.3<br>90.5 |

· Exclusive of costs of land, unfinished plant investment and working capital



### Exhibit 13

1033

### BOILER COSTS

| Date     | Units    | Total H.P. | Price    | Unit Price |
|----------|----------|------------|----------|------------|
| 2/23/07  | 2-400    | 800        | \$13,200 | \$16.50    |
| 5/20/09  | 4-445    | 1780       | 25,200   | 14.15      |
| 2/2/12   | 8 - 600  | 4800       | 63,500   | 13.23      |
| 3/13/13  | 10 - 600 | 6000       | 81,183   | 13.55      |
| 4/19/14  | 4-508    | 2032       | 25,000   | 12.31      |
| 10/22/15 | 2-600    | 1200       | 15,500   | 12.91      |
| 10/25/16 | 4-600    | 2400       | 43,000   | 17.92      |
| 4/18/17  | 4-600    | 2400       | 53,400   | 22.25      |
| 4/24/18  | 4-600    | 2400       | 62,600   | 26.10      |
| 2/20/20  | 8-600    | 4800       | 154,600* | 32.21      |

### TURBINE COSTS

| Rating  | Contract Date         | Price                            | Cost Price<br>K.V.A.  | 1034 |
|---|-----------------------|----------------------------------|-----------------------|------|
| Normal<br>3,500 K.W. @ 100% P.<br>8,000 K.V.A.                  | F. 5/22/09<br>5/ 3/12 | \$62,500.<br>160,000.            | \$17.85<br>20.00      |      |
| 20,000 K.V.A. @ 100%<br>47,000 K.V.A. @ 95% P.<br>47,000 K.V.A. | F. 1/21/15<br>7/31/20 | 196,910.<br>376,000.<br>910,000. | 9.85<br>8.00<br>19.36 |      |

Request for Findings

### STATE OF RHODE ISLAND AND PROVI-DENCE PLANTATIONS

PUBLIC UTILITIES COMMISSION.

PUBLIC UTILITIES COMMISSION on its own motion

28.

NARRAGANSETT ELECTRIC LIGHTING COMPANY.

1037

### REQUEST FOR FINDINGS

SUBMITTED BY NARRAGANSETT ELECTRIC LIGHTING COMPANY.

Narragansett Electric Lighting Company requests the Commission to make the following findings:

1. That the rates contained in Schedule R. I. P. U. C. No. 68 are unjust, unreasonable, insufficient and unjustly discriminatory and preferential and otherwise in violation of the provisions of the Public Utilities Act in that the said rates, tolls and charges yield no return on the value of the property used for service to the Attleboro Company, and the rates, tolls and charges charged by the Narragansett Company to its other customers yield a fair return on the value of the property used for such service.

- 2. That the rates contained in Schedule R. I. P. U. C. No. 125 are just, reasonable, sufficient and not unjustly discriminatory or preferential or otherwise in violation of any of the provisions of the Public Utilities Act for the reason that such rates, tolls and charges yield a fair return and no more than a fair return on the value of the property used for such service.
- That the rates set forth in Schedule R. I.
   P. U. C. No. 68 are detrimental to the public welfare.
- 4. That, upon the evidence before this Commission, the aggregate loss to the Narragansett Company from serving the Attleboro Company for the term of the contract under the contract rate, after a return of 8% on the investment devoted to such service, will be not less than \$1,500,000.00.

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- 5. That continuation of service by the Narragansett Company under Schedule R. I. P. U. C. No. 68 during the term of the contract will result in an increasing operating loss to the Narragansett Company without any return whatever on the investment devoted to such service.
- 6. That, upon the evidence before this Commission, the loss to the Narragansett Company from supplying electricity to the Attleboro Company under Schedule R. I. P. U. C. No. 68, including a return of 8% on that part of its investment used in rendering such service, has been for the years 1918 and 1923 inclusive, as follows:

### Request for Findings

| (9 months) | 1918\$29,479.12 | 1921\$53,852.48 |  |  |  |  |  |
|------------|-----------------|-----------------|--|--|--|--|--|
|            | 1919 48,735.60  | 1922 61,348.07  |  |  |  |  |  |
|            | 1920 41.394.39  | 1923 45,611.33  |  |  |  |  |  |

7. That the service furnished by the Narragansett Company to the Attleboro Company under Schedule R. I. P. U. C. No. 68 during the year of 1923 was rendered at an operating loss to the Narragansett Company of not less than \$4,326.03, without any return whatever on the investment devoted to such service.

8. That upon the evidence before this Commis1043 sion the service furnished and to be furnished by the
Narragansett Company to the Attleboro Company
during the year of 1924, if rendered under Schedule
R. I. P. U. C. No. 68, will result in an operating
loss of not less than \$6,000.00 to the Narragansett
Company, without taking into account any return
whatever on the investment devoted to such service.

9. That the generating and delivery cost of kilo watt hours delivered to the Attleboro Company by the Narragansett Company in 1923 was .0079386 and such cost for 1924 will be no less and that the annual cost per kilowatt of demand of carrying that part of the generating plant, properly allocable to the service furnished the Attleboro Company in 1924 was \$12.37 and for that part of the investment in transformers, cables, sub-stations so allocable was \$2.73 and for the aerial transmission line devoted to such service was \$2.61, making a total cost per kilowatt of demand of \$17.71; that adjusted to the 12½% Federal Income Tax to ascertain the net return, the amount must be raised to

\$19.21; and that upon these facts found by this Commission, the service charge of \$19 set forth in Schedule R. I. P. U. C. No. 125 is reasonable.

- 10. That, considering all the evidence submitted, service by the Narragansett Company under Schedule R. I. P. U. C. No. 125 will yield to the Narragansett Company approximately 8% on the investment devoted by the Narragansett Company to the furnishing of such service.
- 11. That a return of approximately 8% on the value of the investment devoted to the furnishing of service is a reasonable return.

1046

12. In determining the value of the whole or any part of the investment or property of the Narragansett Company for the purpose of these findings the Commission has considered all relevant facts, including original cost, reproduction cost, money honestly and prudently invested, the par value of securities outstanding, the market value of securities outstanding, the sum required to meet operating expenses, and other facts which are relevant, all of which facts this Commission has, after investigation and hearing and considering all the evidence and the arguments of counsel, carefully considered and to each of which it has given due weight.

1047

Respectfully submitted,

ROPES, GRAY, BOYDEN AND PERKINS, HINCKLEY, ALLEN, TILLINGHAST AND PHILLIPS, Attorneys for Narragansett Electric Lighting Company.

Motion of Attleboro S. & E. Co.

### STATE OF RHODE ISLAND AND PROVI-DENCE PLANTATIONS

### PUBLIC UTILITIES COMMISSION

PUBLIC UTILITIES COMMISSION, on its own motion

V.

### NARRAGANSETT ELECTRIC LIGHTING COMPANY

1049

Motion submitted in behalf of Attleboro Steam & Electric Company

As was stated at the beginning of the hearings the Attleboro Steam & Electric Company contends, both as a matter of constitutional law and as a matter of statutory construction, that the contract of 1917 cannot be abrogated. It does not waive this contention but, understanding that the Commission has already ruled against it on these points it does not further argue them now.

Assuming that under proper circumstances the contract of 1917 may be abrogated the fundamental contention of the Attleboro Company is that it cannot be abrogated merely because it is unprofitable or does not yield an 8 per cent. profit but only if the carrying out of the contract would impair the ability of the Narragansett Company to serve the rest of its customers properly and at reasonable rates.

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"Before a contract can be interfered with by the police power, it must appear that the contract does in some measure affect adversely

the welfare of the public. \* \* \*

"If, for instance, continued performance of the contracts in question should bear so heavily on the power company that its general revenues would be depleted to the extent that a recoupment would have to be made at the expense of the other customers, or would otherwise be reflected in its rates on services, to that portion of the public served by the power company, the contracts could and should be abrogated under the police power; but if continued performance of the contracts would only affect the net profits or dividends on that portion of the power company's property devoted to performance of the contracts, then the public interest would not be affected, and there would be no occasion or excuse for the intrusion of the state's police power."

1052

Wichita Railway and Light Company v. Court of Industrial Relations, 214 Pac. Rep. 797; P. U. R. 1923 D 593.

Judge Brown recognizes and adopts this principle. He quotes the opinion of the Supreme Court of the United States in *Arkansas Gas Company* v. *Railroad Commission*, 261 U.S. 379, where the court said among other things:

"While a state may exercise its legislative power to regulate public utilities and fix rates, notwithstanding the effect may be to notify or abrogate private contracts \* \* \* there is, quite clearly, no principle which imposes an obligation to do so merely to relieve a contracting party from the burdens of an improvident undertaking. The power to fix rates when exerted, is for the public wellfare to which private contracts must yield; but it is not an independent legislative function to vary or set

### Motion of Attleboro S. & E. Co.

aside such contracts however unwise and unprofitable they may be."

Judge Brown goes on to say:

"The finding that the contract was unprofitable and therefore discriminatory \* \* \* is a non-sequitur." \* \* \*

"Before the contract can be interfered with under the police power it must appear that the contract does in some manner affect adversely the wellfare of the public.

"There is nothing in the records to show that the defendant brought to the notice of the Commission any evidence that the company would be unable to perform its full duty in the community whose interest it is the function of the Commission to protect." \* \* \*

"Even if the Commission has received an exparte statement that a single contract was for the time being unprofitable, this was far from establishing the fact that the public interest had been injuriously affected."

Attleboro Steam & Electric Company v. Narragansett Electric Lighting Company, 295 Fed. 895, 901, 902.

There is no evidence whatever before the Commission that the continuance of the contract will render the Narragansett Company "unable to perform its full duty to the community". The earnings of the Company are annually producing a large surplus over and above the 8 per cent. dividend and it is conceded that the continuance of the contract would not endanger the payment of the dividends in the future (testimony, p. 67). Thus, even the rights of the stockholders, if they are of any consequence

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in this connection, are not affected. So far as the public is concerned, there is no evidence whatever that the present rates charged to any class of customers are in any way unreasonable or ought in justice to be reduced. The only testimony is to the effect that the present rates are reasonable (p. 66) and that there never has been a complaint concerning them (p. 70).

The Narragansett Company seeks to obtain \$50,000 a year more from the Attleboro Company and says that if it receives this added sum it will be enabled to make a slight reduction in the price charged its customers for residence lighting. There are 50,000 such customers (p. 63). The rates now charged them are reasonable. Certainly there is no public interest requiring the abrogation of the Attleboro contract for the sake of reducing the rates charged these other customers by an average amount of \$1.00 a year per customer.

It may be noted that the Narragansett Company's rates have already been reduced, while this contract has been in effect, by an amount which was estimated to save the public \$140,000 during the first year (pp. 64-65).

Mr. Graustein, in his opinion, asserted that the question before the commission is whether the old rate is a fair rate and if not whether the new rate can be substituted (p. 11). If it be contended that the contract rate is necessarily unfair, if it can be shown that for the time being it is unprofitable or at least does not yield the full 8 per cent, it is submitted that Mr. Graustein's statement of the question is wholly inaccurate and totally inconsistent with the authorities above referred to.

1058

Motion of Attleboro S. & E. Co.

The Chairman of the Commission, during the course of the hearings, stated the rule accurately:

"It is then the duty of the Company to bear its burden up to the point where they affect any equity to the general public" (pp. 72-73).

The Attleboro Company submits no formal requests for rulings of law as its contentions with respect to the law have been sufficiently indicated. It submits the annexed requests for findings of fact from which it appears among other things that the Attleboro Company maintains that even if the contract could be abrogated, the proposed new rate could not be allowed because it is computed on an unfair and improper basis.

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(Sgd.) R. G. DODGE, Counsel for Attleboro Steam & Electric Company.

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Requests for Findings of Fact submitted by

### ATTLEBORO STEAM & ELECTRIC COMPANY

- 1. The contract of 1917 was entered into by the parties at the solicitation of the Narragansett Company which expressly stated that it expected to receive from it during the earlier years of the contract a profit less than that expected to be yielded by the Company's service generally (See Ex. 1; Testimony, p. 85).
- 2. At the time when the contract in question was entered into, the Attleboro Company was producing at its own plant all the electricity which it needed. After the contract was made and in reliance on it the Attleboro Company dismantled its generating plant and is no longer in a position to produce its own current (p. 85).
- 3. The contract was made at the time when the cost of electrical equipment had already greatly increased as compared with its cost before the war and there was the strongest reason for apprehending that it would increase still further (See Exs. 11, 12, 13).
- 4. Rate 68, being that set forth in the contract of 1917, was approved by the Commission as a special rate to the Attleboro Company for 20 years, with the full expectation, as stated by the officers of the Narragansett Company, that it would not yield the full profit during the earlier years of the contract period.

### Requests for Findings of Fact

- 5. So far as appears, none of the rates charged by the Narragansett Company to customers other than the Attleboro Company are unreasonably high; nor has there been any complaint as to such rates.
- So far as appears, the service rendered by the Narragansett Company to its customers generally is adequate and satisfactory in all respects.
- 7. It does not appear that the existence of a contract with the Attleboro Company has in any way prevented the Narragansett Company from rendering any and all service called for by other customers or in any respect embarrassed it in meeting the reasonable requirements of the public.
  - 8. The continuance of the contract will not endanger the continued payment of 8 per cent. dividends annually to the stockholders of the Narragansett Company.
  - 9. Since the contract of 1917 was negotiated the gross and net earnings of the Narragansett Company have rapidly increased. The gross earnings in 1917 were \$2,566,000 and in 1923 \$6,600,000. The surplus after the payment of dividends in 1923 amounted to \$293,392.94 and for the three months ending March 31, 1924 surplus was \$248,969.02, these being the last figures available at the time of the hearings (pp. 67, 91).
  - 10. The Narragansett Company seeks by its proposed new rate which is aimed solely at the Attleboro Company (see statement of Chairman p. 1;

testimony of Gray, pp. 57-58, 60), to obtain from the Attieboro Company some \$50,000 a year additional income, yet its officials admitted in effect that if it were receiving about \$23,700 a year more they would not have instituted these proceedings. This admission was made by Mr. Gray, the company's rate expert, who concedes that if the unit cost of the generating plant had remained at \$45 the Company would not have complained of the contract rate (pp. 120, 121); yet it appears that of the increased rate now asked for only about \$23,700 is due to the increase of unit cost of the generating plant from \$45 to \$89.15.

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11. It is only by an unfair method of figuring that the contract of 1917 can be shown to have resulted in an actual loss to the Narragansett Company or to have done more than merely reduce somewhat the 8 per cent, profit on the part of the plant devoted to the performance of the Attleboro contract. The Company's method of figuring is unfair in the following respects:

(a) It apportions "generating plant costs" among its customers according to the maximum primary demand. Although a great deal of secondary current is disposed of at a profit (p. 38) this is totally disregarded. The result is very unfair to a customer which like the Attleboro Company takes only primary current. Thus in 1923 the Attleboro Company, taking about 1/35 of the total output of the Narragansett Company (p. 49), is chargeable, according to the Narragansett Company's new method of figuring, with 3600/55000 or about 1/35 of the capital costs, while the New Eng-

land Power Company, which takes one-half of the total output (p. 52) and thus takes seventeen and one-half times as much current as the Attleboro Company is charged with only a rate of four times as much of the generating plant capital costs.

- (b) The peak primary load of the Narragansett Company is taken at too low a figure. It was always taken at 60,000 in sending bills under rate 101 (p. 133; See also Ex. 9).
- (c) An unwarranted attempt is made by the Narragansett Company to recoup the loss which it incurred in building the transmission line in Massachusetts (pp. 137, 156).
  - (d) In apportioning the overhead (Ex. 1, last page), no consideration whatever is given to the fact that the Attleboro Company is a single wholesale customer (p. 46).
  - (e) Sundry interest charges are included which are unfair (see pp. 134, 164).

If only a small fraction of the unfairness could be eliminated from this figuring it would be obvious that the Narragansett Company is not suffering an out-of-pocket loss from this contract but is merely failing to reach the full 8 per cent. of profit on it (see p. 48; pp. 107-8).

1074

(Stamped) Received July 10, 1924 Public Utilities Commission State of Rhode Island

### STATE OF RHODE ISLAND AND PROVI-DENCE PLANTATIONS PUBLIC UTILI-TIES COMMISSION

Public Utilities Commission on its own motion

VS.

NARRAGANSETT ELECTRIC LIGHTING COMPANY

1076

## BRIEF OF NARRAGANSETT ELECTRIC LIGHTING COMPANY

### STATEMENT OF CASE.

The Narragansett Electric Lighting Company, on the seventh day of May, 1924, filed with the Commission a rate schedule, R. I. P. U. C. No. 125, cancelling R. I. P. U. C. No. 68 and No. 101, to be effective on all electricity delivered after midnight, on June 14, 1924. The Commission on its own motion ordered that an investigation be made and that a public hearing be held on Monday, May 26, 1924, upon the question of whether the existing rates, tolls and charges charged by the Narragansett Electric Lighting Company to the Attleboro Steam and Electric Company, or those proposed to be charged to said Company, and other electric lighting companies under the said rate schedule R. I. P. U. C. No. 125 were unjust, unreasonable, insufficient or unjustly discriminatory, or preferen-

tial or otherwise in violation of any of the provisions of the Public Utilities Act of the State of Rhode Island, and otherwise upon the question as to the propriety of the proposed change or changes embodied in said schedule No. 125. The Commission ordered that notice of such investigation and of such hearing should be given by mail to the Attleboro Company and the Narragansett Company and by publication on May 16 and May 23, 1924, in the Providence Journal. Notice was accordingly duly given. With the assent of counsel, the hearing was continued until Monday, June 2, 1924, on which day a formal public hearing was held before the Commission and evidence was taken. hearing was continued on Monday, June 16, 1924, and further evidence was submitted and arguments of counsel were heard.

Schedule R. I. P. U. C. No. 68 was duly filed on May 16, 1917, and then approved by the Commission under the provisions of Section 42 (b) of the Public Utilities Act. The rate set forth in this schedule was the rate set forth in the contract dated May 8, 1917 by and between the Attleboro Company and the Narragansett Company whereby the Narragansett Company agreed to furnish the Attleboro Company with electric energy for a period of twenty (20) years at the rates specified therein.

The Narragansett Company contends that the present rate is unjust, unreasonable, insufficient and unjustly discriminatory and otherwise in violation of the provisions of the Public Utilities Act and the rate set forth in Schedule R. I. P. U. C. No. 125 is just, reasonable and not unjustly discriminatory.

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The Attleboro Company admits that the Narragansett Company is not receiving for the service rendered to the Attleboro Company a fair return on the investment used for that service but contends that no change should be made in the contract rate if the Narragansett Company is earning a sufficient amount of money from the service rendered to all customers to provide a reasonable return on its entire investment, and that neither the General Assembly nor the Commission has power to change the contract rate under the circumstances. Narragansett Company contends that upon the uncontradicted evidence before the Commission, the public welfare is adversely affected (1) because service is being rendered by the Narragansett Company to the Attleboro Company at less than the actual operating cost thereof (2) because the Narragansett Company is receiving no return on the investment used in such service (3) because the Narragansett Company is not receiving a substantial return on the investment used in such service (4) because the Narragansett Company is not receiving a reasonable return on the investment used in such service and (5) because the contract rate is unjustly discriminatory and unreasonable.

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I.

1083

All contracts made by utilities respecting rates are subject to regulation by the state in the exercise of its police power and all such contracts therefore are made in contemplation of such regulation.

The leading case on the power of the state to alter contract rates is Union Dry Goods Company 1084

Brief of Narragansett Electric Lighting Co.

v. Georgia Public Service Corporation, 248 U.S. 372 (1919) where the court said:

"That private contract rights must yield to the public welfare, where the latter is appropriately declared and defined and the two conflict, has been often decided by this court. (The court then quoted from a number of cases.) These decisions, a few from many to like effect, should suffice to satisfy the most skeptical or belated investigator that the right of private contract must yield to the exigencies of the public welfare when determined in an appropriate manner by the authority of the state."

1085

In Producers Transportation Company v. R. R. Comm., 251 U. S. 228, 232 (1920), the court said:

"A common carrier cannot by making contracts for future transportation or by mortgaging its property or pledging its income prevent or postpone the exertion by the State of the power to regulate the carrier's rates and practices. Nor does the contract clause of the Constitution interpose any obstacle to the exertion of that power."

1086

In Hudson County Water Co. v. McCarter, 209 U. S. 349, 357, the court said:

"One whose rights, such as they are, are subject to state restriction, cannot remove them from the power of the State by making a contract about them. The contract will carry with it the infirmity of the subject matter." In McCook Irrigation & W. P. Co. v. Burtless, 98 Neb. 141, 152 N. W. 334, P. U. R. 1915C 587, the court said:

"Any contracts entered into between the irrigation company and consumers under the ditch, with reference to the annual rates which should be charged for the use of water, were entered into with the law forming a part of the contract, and were subject to legislative control" (cases cited).

In Minneapolis, St. Paul and Sault Ste. Marie R. Co. v. Menasha W. W. Co., 159 Wis. 130, 150 N. W. 1088 411 (1914) the court said:

"The power to regulate the rates of common carriers is a sovereign power of the state \* \* \* And every contract made as to such rates with a corporation authorized to contract in reference thereto is made with the knowledge of and subject to the right of the state at any time to resume the exercise of such soverign power. The legislative right to supersede it is as clear as though it were written into the contract itself, for the law implies it."

In Raymond Lumber Co. v. Raymond Light & Water Co., 92 Wash. 330, 159 Pac. 133, P. U. R. 1916F 437, the court said:

1089

"The rule is that contracts upon subjects which are within the police power, even though valid when made, must be taken to have been

entered into in view of the continuing power of the state to control the rates to be charged by public service corporations (Cases cited).

\* \* \* The reason for this rule is, that if contracts valid when made, covering a subject neither within the police power, are not subject to the subsequent exercise of that power on the part of the state, it would place in the hands of individuals the power to withdraw from the state the right to subsequently exercise its police power."

In Law v. R. R. Comm., 184 Cal. 737, 195 Pac. 1091 423, P. U. R. 1921C 156 (Cal. 1921) the court said:

"If the service contracted for was devoted to public use \* \* \* the contract for the service was subject to the exercise of the police power and, the state having elected upon the commission the power to prescribe uniform rates for the service, petitioner cannot complain if the exercise of this power results in the practical annulment of his private contract fixing compensation for a public service."

Many other cases to like effect might be cited. Collections will be found in notes in 9 A. L. R. 1423 and 3 A. L. R. 730, 738.

If the rule were otherwise than as indicated in the above cases, it is clear that a public utility could make contracts with favored customers which might be grossly preferential and the whole purpose of the Public Utility Act would thereby be defeated.

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#### II.

While the exercise of the police power must always be predicated upon the public welfare, it is primarily a legislative function to define the public welfare, and the legislature has already done this in requiring all rates to be reasonable and not unjustly discriminatory.

It is well settled that it is primarily for the legislature to define the public interest. The legislature has a wide discretion in determining what is for the public welfare, and its decision will not be overthrown unless it clearly appears that the legislature was unjustified in its conclusion.

1094

Barbier v. Connolly, 113 U. S. 27 (1885) Mugler v. Kansas, 123 U. S. 623 (1887) Middleton v. Texas Power & Light Co., 249 U. S. 152 (1919) Dominion Hotel v. Arizona, 249 U. S. 265 (1919)

In defining acts and practices which are detrimental to the public welfare, the legislature of Rhode Island has declared in Sec. 38 of the Public Utilities Act (Gen. Laws, 1923, C.253):

"The rate, toll or charge \* \* \* made, exacted, demanded, or collected by any public utility \* \* \* for any heat, light, water or power produced, transmitted, delivered or furnished \* \* \* or for any service rendered or to be rendered in connection therewith, shall be reasonable and just, and every unjust or unreasonable

1096

Brief of Narragansett Electric Lighting Co.

charge for such service is prohibited and declared unlawful."

The legislature has also declared, in Sec. 40 of the Public Utilities Act:

"If any public utility shall make or give any undue or unreasonable preference or advantage to any particular person, firm or corporation, or shall subject any particular person, firm or corporation to any undue or unreasonable privileges or disadvantage in any respect whatsoever, such public utility shall be deemed guilty of a misdemeanor \* \* \* ."

1097

In Sec. 39 of the Act unjust discrimination is declared to be unlawful and in Sec. 41 rebates, concessions and discriminations are condemned.

The Narragansett Company having shown that the present rate is unreasonable and unjustly discriminatory has ipso facto established that the public welfare as defined by the legislature will be injuriously affected by a continuance of said rate.

The rate fixed by contract with the Attleboro Company, if found to be unreasonable or unjustly discriminatory within the test laid down by the Supreme Court of the United States, is not saved from the condemnation of the sections cited because it was originally approved by the Commission under Section 42 (b). This section reads as follows:

1098

"With the approval of the commission any public utility may give free transportation or service, upon such conditions as such public utility may impose, or grant special rates therefor to the state, to any town or city, or to any water or fire district, and to the officers thereof, for public purposes, and also to any special class or classes of persons, not otherwise referred to in this section, in cases where the same shall seem to the commission just and reasonable, or required in the interests of the public, and not unjustly discriminatory."

Obviously, it was not intended that by approval of a rate under this section the State should be deemed to have surrendered its power to regulate rates where changed conditions have caused rates approved by the Commission to become unreasonable or unjustly discriminatory. It is a firmly established doctrine of the Supreme Court of the United States that strong and explicit language must be used by the State, expressly depriving itself of its rights to act under the police power, before the State will be deemed to have bargained away its right to legislate for the welfare of its citizens.

1100

Milwaukee Electric Ry. v. Wisconsin R R. Comm., 238 U. S. 174, 180 (1915)

"Suit to enjoin the commission from enforcing an order reducing fares below those fixed by a city ordinance, on the ground that the ordinance constituted an irrevocable contract by the city."

1101

At p. 180, the court said:

"The fixing of rates which may be charged by public service corporations, of the character here involved, is a legislative function of the State, and while the right to make contracts which shall prevent the State during a given period from exercising this important power has been recognized and approved by judicial decisions, it has been uniformly held in this court that the renunciation of a sovereign right of this character must be evidenced by terms so clear and unequivocal as to permit of no doubt as to their proper construction. This proposition has been so frequently declared by decisions of this court as to render unnecessary any reference to the many cases in which the doctrine has been affirmed. principle involved was well stated by Mr. Justice Moody in Home Telephone Co. v. Los Angeles, 211 U.S. 265, 273:

"The surrender, by contract, of a power of government, though in certain well-defined cases it may be made by legislative authority, is a very grave act, and the surrender itself, as well as the authority to make it, must be closely scrutinized. No other body than the supreme legislature (in this case, the legislature of the State) has the authority to make such a surrender, unless the authority is clearly delegated to it by the supreme legislature. The general powers of a municipality, or of any other politicial subdivision of the State are not sufficient. Specific authority for that purpose is required."

And in Atlantic Coast Line R. R. Co. v. Goldsboro, 232 U. S. 548, 558, the court said:

1103

"It is settled that neither the 'contract clause' nor the 'due process' clause has the effect of overriding the power of the State to establish all regulations that are reasonably necessary to secure the health, safety, good order, comfort, or general welfare of the community; that this power can neither be abdicated nor bargained away, and is inalienable even by express grant; and that all contract and property rights are held subject to its fair exercise."

### III.

1106

The earnings of a utility from other customers do not justify a noncompensatory or inadequate return from one customer.

In P. U. Commission v. Wichita Railroad & Light Co., 268 Fed. 37 (8th Circuit, 1920) the court had before it a situation similar to ours. The Utility had filed a petition to raise certain contract rates charged to large customers and the petition, although alleging that the contracts did not return a proper profit upon the property devoted to that service, did not allege that the contract rates would cause the Utility to become insolvent or would prevent it from discharging its duty to the public. It was claimed that the Utilities Commission could not raise such contract rates in the absence of such an averment in petition. The Circuit Court of Appeal for the 8th circuit held that the petition was sufficient, saying:

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"The failure of the Gas & Electric Company to state in its petition that the rates then in

force would cause it to become insolvent, or would prevent it from discharging its duty to the public, did not deprive it of the right to ask for compensatory rates from the large consumers, if the rates charged these consumers are noncompensatory, even if, when added to the rates charged the smaller consumers, the net income is sufficient to prevent the company from becoming insolvent, or enable it to discharge its duty to the public. In Northern Pacific Ry. v. North Dakota, 236 U. S. 585, 594, 596, 597; 35 Sup. Ct. 429, 432, 433 (59 L. Ed. 735, L. R. A. 1917F, 1148, Ann. Cas. 1916A. 1), the Supreme Court of North Dakota had held:

1109

"In order to establish such a noncompensatory rate to be confiscatory (referring to rate on one article, lignite coal), it must further appear that any deficit under the rate affects the net intrastate freight earnings materially and reduces them to a point where they are insufficient to amount to a reasonable rate of profit in the amount of the value of the railroad property within the state contributing to produce such net earnings.'

"This the Supreme Court of the United States held to be erroneous. The court said:

1110

"'The state cannot estimate the cost of carrying coal by throwing the expense incident to the maintenance of the roadbed, and the general expenses, upon the carriage of wheat, or the cost of carrying wheat by throwing the burden of the upkeep of the property upon coal and other commodities. \* \* \* The outlays that ex-

1111

clusively pertain to a given class of traffic must be assigned to that class and the other expenses must be fairly apportioned.'

"The same principle was announced in Norfolk & Western Ry. v. Conley, 236 U. S. 605, 35 Sup. Ct. 437, 59 L. Ed. 745. In that case the act involved was a passenger rate on railroads. The Supreme Court of West Virginia had followed the rule adopted by the Supreme Court of North Dakota in the Northern Pacific R.R. The Supreme Court, reversing the de-

cree, held:

"The state may not select either of these departments (freight or passenger) for arbitrary control. Thus it would not be contended that the state might require passengers to be carried for nothing, or that it could justify such action by placing upon the shippers of goods the burden of excessive charges in order to supply an adequate return for the carrier's entire service."

1112

Upon appeal to the Supreme Court of the United States (260 U. S. 48, 1922) the decision of the Circuit Court of Appeals was reversed upon the ground that, motion for judgment having been overruled by the Circuit Court of Appeals, the complainant should have been offered an opportunity to traverse the allegations of fact by the Utility as to the reasonableness of the rates, the complainant having reserved this right. The remainder of the opinion is a dictum by Chief Justice Taft. At page 54 he states that two contentions were made in the court below: one, that the order of the Com-

mission was void on its face for lack of a necessarv finding that the existing contract rates were unreasonably low, and the other, that the facts averred in the petition were not sufficient to justify such a finding if it had been made. The second contention is that just referred to which the Circuit Court of Appeals denied. The Chief Justice devoted his entire dictum to the first contention and did not question the soundness of decision of the Circuit Court of Appeals on the other point. It seems to be a fair inference that had there been a finding of fact after hearing and investigation that the existing rates were unjust, unreasonable, unjustly discriminatory or unduly preferential, the decree of the Circuit Court of Appeals would have been upheld and it is submitted that this decision effectually disposes of the contention of the Attleboro Company.

In Interstate Commerce Comm. v. Union Pacific R. R., 222 U. S. 541, 549 (1912), the court said:

"Where the rates as a whole are under consideration, there is a possibility of deciding, with more or less certainty, whether the total earnings afford a reasonable return. But whether the carrier earned dividends or not sheds little light on the question as to whether the rate on a particular article is reasonable. For, if the carrier's total income enables it to declare a dividend, that would not justify an order requiring it to haul one class of goods for nothing, or for less than a reasonable rate. On the other hand, if the carrier earned no dividend, it would not have warranted an order fixing an unreasonably high rate on such article."

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In Atlantic Coast Line v. Corp. Comm., 206 U.S. 1, 26 (1906), the court said:

"Let it also be conceded that a like repugnancy to the Constitution of the United States would arise from an order made in the exercise of the power to fix a rate when the result of the enforcement of such order would be to compel a carrier to serve for a wholly inadequate compensation a class or classes selected for legislative favor even if, considering rates as a whole a reasonable return from the operation of its road might be received by the carrier."

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In harmony with the foregoing cases is the doctrine enunciated by the Supreme Court in Smyth v. Anies, 169 U. S. 466, 541 (1898):

"The State cannot justify unreasonably low rates for domestic transportation, considered alone, upon the ground that the carrier is earning large profits on its interstate business, over which, so far as rates are concerned, the State has no control. Nor can the carrier justify unreasonably high rates on domestic business upon the ground that it will be able only in that way to meet losses on its interstate business. So far as rates of transportation are concerned, domestic business should not be made to bear the losses on interstate business, nor the latter the losses on domestic business."

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This doctrine is approved and affirmed by Mr. Justice Hughes in Minnesota Rate Cases, 230 U. S. 352 (1913) at page 435:

"Where the business of the carrier is both interstate and intrastate, the question hether a scheme of maximum rates fixed by the State for intrastate transportation affords a fair return, must be determined by considering separately the value of the property employed in the intrastate business and the compensation allowed in that business under the rates prescribed. This was also ruled in the Smyth case (id., p. 541). The reason, as there stated. is that the State cannot justify unreasonably low rates for domestic transportation, considered alone, upon the ground that the carrier is earning large profits on its interstate business, and, on the other hand, the carrier cannot justify unreasonably high rates on domestic business because only in that way is it able to meet losses on its interstate business."

In Mt. Carmel Pub. Utility & Service Co. v. Pub. Util. Comm., 297 Ill. 303, 309, 130 N. E. 693 (1921) the court said:

"Where a public utility corporation is engaged in furnishing to the public, through various departments of its business, different kinds of service, it cannot be compelled to carry on a branch of its business which furnishes one kind of such service at a loss even though at the same time its whole business may be conducted at a profit. Brooks-Scanlon Co. v. Railroad Com., 251 U. S. 396; Northern Pacific Railroad Co. v. North Dakota, 236 U. S. 585; Norfolk & Western Railroad Co. v. West Virginia, 236 U. S. 605."

1121

The latest case on the subject is Vandalia Railroad Co. v. Schnull, 255 U. S. 113 (1920). In this case, the lower court had adopted the principle that a rate was to be deemed a fair rate if the carrier received in the aggregate sufficient remuneration, even though the rate in question was itself not remunerative. The Supreme Court reversed the lower court on the ground that this was an incorrect principle, holding that the revenue from traffic to which the rates apply is the test of their legality and any deficiency in them cannot be made up by rates on some other traffic. The court quoted from Northern Pac. Ry. Co. v. North Dakota, 236 U. S. 585 and from Norfolk & Western Ry. Co. v. West Virginia, 236 U. S. 605, and stated:

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"These cases leave nothing to be said, nor need we review the prior cases from which they are deductions."

The Northern Pacific case had carefully reviewed a number of prior decisions of the Supreme Court, many of which appeared to conflict with the doctrine laid down in the Northern Pacific case, and it is plain from the decision that anything in the previous cases, inconsistent with the present decision, the court intended to overrule.

It will be noted that in the Northern Pacific and similar cases the question before the court was as to the reasonableness or unreasonableness of a rate fixed by the State and that in the Wichita case in 268 Fed., the court had before it the question whether the police power could be exercised to alter a rate fixed by contract by the utility itself. The Circuit Court of Appeals in the Wichita case

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held that the same principle applied to each class

of cases: namely, that the reasonableness or unreasonableness of a rate must be determined by looking at the return earned by that rate alone regardless of whether that rate was fixed by contract or otherwise and that the fact that the Company was making a fair return from its entire service would not prevent the rate in question from being invalid. It is thinkable that in the type of case represented by the Northern Pacific case, the court might adopt the test now urged by the Attleboro Company, for if a utility's return as a whole is adequate, it is arguable that it is not being compelled to use its property in the public service without adequate return. In the early cases of the first type, the same contention was made as is now made by the Attleboro Company and this seems at one time to have been the view of the United States Supreme Court. See Willcox v. Consolidated Gas Company, 212 U. S. 19 (1909).

The Supreme Court in the Northern Pacific case, in adopting the contrary principle, disposed of the Willcox case as follows (at p. 601 of the opinion):

1128

"In Willcox v. Consolidated Gas Co., 212 U. S. 19, in addition to the rate for gas supplied for general consumption in the City of New York, there was a lower rate fixed for that furnished to the City itself. It was said by the court that the criticism of the 'wholesale' rate to the City was met by the fact that the total returns from the sale of gas were adequate. It was not established in that case that this 'wholesale' rate required a service without substantial compensation in addition to cost."

The Willcox doctrine has thus been overthrown and the doctrine of the Northern Pacific case firmly entrenched by the two later cases above cited.

### IV.

Cases cited by Counsel for the Attleboro Company.

Counsel for the Attleboro Company in support of his position quoted from the case of Witchita Railroad and Light Company v. Court of Industrial Relations, 214 Pac. 797, P. U. R. 1923D 593 (Kansas 1923). It is submitted that this case in no way sustains counsel's contention. There were three cases included in the opinion with facts substantially similar. In one the Commission had found that the contract rates in question were discriminatory and unjust, basing this finding on an estimated cost for fuel oil of around \$2.50 a barrel, the cost of fuel oil being 90% of the total expense of serving the customer in question. The customer took the case to the lower court and at the time of the argument the price of fuel oil had dropped to The return to the utility, on its in-65c a barrel. vestment, with oil even as high as \$1.38 a barrel, was found by the court to be over 30%. The lower court held, therefore, that in the light of the subsequent developments the order of the Commission could not be sustained. The Supreme Court of the State affirmed the decision of the lower court. Considering the fact that at the time of the trial the return being earned on the contract was more

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than compensatory and promised in the future to remain compensatory and that the return in the past, even taking into account losses suffered during one year, had averaged 5.56%, the case is obiviously fundamentally different from ours. The other two cases covered by the decision were similarly decided. The evidence in our case is undisputed that the return being earned on the contract is not compensatory, that the losses will become greater in the future, that the receipts under the contract in the past have yielded no return whatever on the investment.

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(1) "Under this schedule the loss to the Narragansett Company for the period of the contract will be \$1,512,662.91 \* \* \* "

### From Page 1 of Exhibit No. 10.

(2) "Loss to Narragansett Electric Lighting Company through selling electricity under R. I. P. U. C. No. 68

| "1923 |  |  |  |  |  | • |  |  |  |  | <b>\$</b> 45,611.33 |
|-------|--|--|--|--|--|---|--|--|--|--|---------------------|
| 1924  |  |  |  |  |  |   |  |  |  |  | 50,918.37"          |

## From Page 5 of Exhibit 10.

1134

(3) "The total of these last three items, \$16,785.09, \$3,562.65 and \$4,478.74 is \$24,826.48. If we deduct from this amount \$20,500.45, such amount being the net receipts over and above the generating and delivery cost of electricity, we show a loss of \$4,326.03 before giving any consideration to return."

From Page 3 of Exhibit 2. re 1924.

(4) "Q388. You have testified that this contract involved a current loss of \$45,000 or \$50,000; is there any reason to think that, if the contract was to run its full term on the rates fixed in 68, it will finally work itself out where it pays its full share of the cost to the company? A. It will not.

Q389. Is there any chance of that paying a fair return? A. There is none."

From examination of Mr. Jesse E. Gray. Page 73 of record.

1136

Counsel for the Attleboro Company also cited Arkansas Natural Gas Co. v. Arkansas Railroad Commission, 261 U. S. 379 (1923). In this case the Commission refused to consider a petition for the increase of contract rates because the state statute expressly provided that the Commission should have no jurisdiction to modify any existing contracts and the Supreme Court of the United States sustained this ruling of the Commission. In this case it was perfectly clear that in the exercise of its police power as expressed in the Public Utilities Act the legislature had expressly excepted preexisting contracts and that the Commission was under no obligation to interfere with such contracts apart from any statute.

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Counsel for the Attleboro Company further relied upon language used by Judge Brown in Attleboro Steam & Electric Company v. Narragansett Electric Lighting Company, 295 Fed. 895 (Dist. of

Rhode Island 1924). Judge Brown, in commenting upon the order of this Commission made in 1921, said (at page 901 of the opinion):

"There was no finding that a present loss would result in rendering the contract as a whole unprofitable (cases cited). Before a contract can be interfered with under the police power, it must appear that the contract does in some manner affect adversely the welfare of the public \* \* \* Even if the Commission had received an ex parte statement that a single contract was for the time being unprofitable, this was far from establishing the fact that the public interest had been injuriously affected."

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The above quotation indicates the cause of the language of Judge Brown relied on by counsel for the Attleboro Company. Now, instead of the Commission's having only an ex parte statement that the contract is for the time being unprofitable the uncontradicted evidence now before this Commission is that the contract rate fails by a wide margin to give the Narragansett Company any substantial return, both at the present time and for the entire term of the contract, and fails to pay the actual cost of service exclusive of any return on the investment used in furnishing such service, and that the loss, instead of becoming less, will increase in future years. It necessarily follows that these rates are unjustly discriminatory and preferential as compared with other rates charged by the company, which yield a fair return.

#### CONCLUSION.

For the reasons urged in the final agreement of this cause and upon the basis of the authorities above discussed, it is respectfully submitted that Schedule R. I. P. U. C. No. 125 should be approved and established by your Commission as the schedule in force in place of Schedule R. I. P. U. C. No. 68 and No. 101. The right of your Commission to establish such new rates in derogation of an existing contract cannot be disputed and we understand is not disputed by counsel for the Attleboro Com-The only question is whether the existing rate is unreasonable or unjustly discriminatory and this has been established by uncontradicted testi-No testimony in rebuttal has been submitted by the Attleboro Company. Based upon the computations and the estimates made in the exhibits submitted by the Narragansett Company, the Attleboro Company will have an advantage in rates over the Rhode Island customers of the Narragansett Company over the entire period of the contract to the extent of the aggregate sum of over No estimate has one million and a half dollars. been submitted indicating that this sum is too large. But even if the expectation of the Narragansett Company with reference to the working of the contract in the future should be mistaken, it will at all times be open to the Commission to again revise the rate. Under no circumstances, therefore, can the establishment of Schedule No. 125 work an injustice. The Attleboro Company has already had the advantage of much lower rates than it is entitled to for the past six years, and it seems clear

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that the general public and the Rhode Island consumers should no longer be penalized by maintaining in force a rate which is admittedly far below a fair rate.

Respectfully submitted,

ROPES, GRAY, BOVDEN & PERKINS, HINCKLEY, ALLEN, TILLINGHAST & PHILLIPS, Attorneys for Narragansett Electric Lighting Company

A. R. GRAUSTEIN,
ARTHUR M. ALLEN,
1145 F. D. COMERFORD,
JOHN B. HOPKINS,
Of Counsel.

Received July 10, 1924 Public Utilities Commission State of Rhode Island

## PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

PUBLIC UTILITIES COMMISSION On Its Own Motion

V.

#114.

NARRAGANSETT ELECTRIC LIGHTING COMPANY.

In the above entitled cause it appearing to the Commission that further time for consideration is 1148 needed.

Upon consideration, it is

(857) ORDERED: That tariff R. I. P. U. C. #125, cancelling R. I. P. U. C. #168 and #101 filed by Narragansett Electric Lighting Company to become effective on all electricity delivered after 12 o'clock midnight June 4, A. D. 1924 and which was suspended by Commission Order Number 8351/2 until August 14, A. D. 1924 is further suspended until September 14, A. D. 1924.

Dated this thirteenth day of August, A. D. 1924.

PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

1149

 $\mathbf{B}\mathbf{y}$ WILLIAM C. BLISS, SAMUEL E. HUDSON, ROBERT F. RODMAN.

Commissioners.

SEAL A true copy.

Attest:

GEORGE A. CARMICHAEL, Secretary.

### Decision and Order of Commission

### COPY

### PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

PUBLIC UTILITIES COMMISSION on its own motion

v.

No. 114.

NARRAGANSETT ELECTRIC LIGHTING COMPANY.

1151

Appearances: Ropes, Gray, Boyden & Perkins.
Hinckley, Allen, Tillinghast &
Phillips,

A. R. GRAUSTEIN

ARTHUR M. ALLEN

F. D. COMERFORD

JOHN B. HOPKINS

Of Counsel for Narragansett Electric Lighting Company;

ROBERT G. Dodge, for the Attleboro Steam and Electric Company.

This is an investigation, instituted by the Public Utilities Commission on its own motion, upon the question of whether the existing rates, tolls and charges of the Narragansett Electric Lighting Company, hereinafter referred to as the Narragansett Company, now charged to the Attleboro Steam & Electric Company, hereinafter referred to as the Attleboro Company, or those proposed to be charged to said Company and other electric lighting companies under a certain rate schedule, R. I. P. U. C.

No. 125, cancelling R. I. P. U. C. No. 68 and No. 101, are unjust, unreasonable, insufficient or unjustly discriminatory, or preferential or otherwise in violation of any of the provisions of the Public Utilities Act of the State of Rhode Island, and otherwise upon the question of the propriety of the proposed change or changes embodied in said schedule No. 125.

Due notice of the investigation and the time and place of public hearing thereon, was given to the Narragansett Company, and to the Attleboro Company, the only customer of said Narragansett Company affected by the proposed rate, and further notice of such investigation and public hearing was given by publication of advertisement in the Provi-

dence Journal.

The Narragansett Company and the Attleboro Company were represented by counsel, evidence was presented in the form of oral testimony and various exhibits, and the case was argued upon briefs.

The Narragansett Company operating a large central station for the generation of electricity by steam and located at tide-water in the city of Providence, in the early part of the year 1916, entered into negotiations with the Attleboro Company, at that time serving its customers in the city of and territory surrounding the city of Attleboro, in the Commonwealth of Massachusetts, with electricity generated in its own steam plant, located at said Attleboro, looking to the sale by the Narragansett Company and the purchase by the Attleboro Company of electric energy, to cover a period of twenty These negotiations culminated in the execution of a contract between the two companies, dated May 8, 1917.

1154

### Decision and Order of Commission

The matter was first presented to the Commission in the form of the following request in writing contained in a letter of the Narragansett Company dated May 14, 1917, accompanying the filing of a schedule R. I. P. U. C. No. 68 of the Narragansett Company which letter (Exhibit No. 4) and schedule (Exhibit No. 6) were as follows:

"Providence, R. I., May 14th, 1917.

Public Utilities Commission, 1157 Providence, R. I.

EXHIBIT

Attention William C. Bliss, Esq., #4
Chairman.

Dear Sirs:

We are handing you herewith, R. I. P. U. C. No. 68, covering special rate for electricity to be sold to the Attleboro Steam & Electric Company at the State Line between Rhode Island and Massachusetts.

This contract is made for a period of twenty (20) years and covers the purchase of all electricity required by the Attleboro Steam & Electric Company for its own uses and for sale in the City of Attleboro and adjacent territory.

As the Narragansett Electric Lighting Company does not have rights to build and maintain transmission lines in the State of Massachusetts, it is necessary that lines be furnished by Massachusetts corporations. Therefore, the contract covers the

furnishing of a line in the Town of Seekonk, Massachusetts, by the Seekonk Electric Company, and in the City of Attleboro by the Attleboro Steam & Electric Company. Under the terms of the contract the Narragansett Electric Lighting Company pays to the Attleboro Steam & Electric Company fifteen per cent. (15%) of the original cost of said transmission line, and the Attleboro Steam & Electric Company repairs and maintains the same in proper condition to transmit the current contracted for. The Narragansett Electric Lighting Company pays to the Seekonk Electric Company fifteen per cent. (15%) upon the original cost of the transmission line, plus any sums expended thereon in the future, which would be considered by the Massachusetts Board of Gas & Electric Light Commissioners as assets to capitalize. These sums would not include repairs and maintenance on the line.

1160

The Attleboro Steam & Electric Company is to furnish at its own expense the necessary transformers, switching arrangements, etc., to properly receive the current contracted for, and the Narragan-sett Electric Lighting Company is to pay annually to the Attleboro Steam & Electric Company \$1,750.00 for the operation of the receiving sub-station by the Attleboro Company.

Under the provisions of the contract the price of 8.57 mills per KWH is subject to increase or decrease for fluctuations in the cost of coal to the Narragansett Electric Lighting Company above or below \$3.50 per long ton delivered alongside its generating station.

1161

The contract also provides for decrease of the above mentioned price of 8.57 mills per KWH to cover discoveries, inventions or improvements which materially decrease the cost of producing or trans-

mitting said electricity and further provides for increase or decrease in the price of current to cover any increase or decrease in the cost of generating or transmitting the current caused by any new increased or decreased taxes, imposts, etc.

In obtaining the price specified in the contract,

we have figured on the purchase of electricity by the Attleboro Steam & Electric Company for the full period of twenty (20) years covered by the contract and have assumed that the current consumption would increase from approximately 4,500,000 KWH during the first year of the contract to approximately 20,000,000 KWH during the last year of the contract. This would make the total sale of current during the twenty years approximately 205,-000,000 KWH. The fixed charges on the generating and transmission equipment have been figured for the entire period of the contract and pro-rated for each KWH. In this way the profit from this particular current is somewhat lower during the earlier years of the contract and somewhat higher during the later years than the average profit which we believe we are entitled to.

We feel that the addition of this load to our generating station will decrease the cost of all current generated and in this way our customers in Rhode Island will receive the benefit of this contract.

1164 We, therefore, respectfully request that you waive the usual statutory notice and allow this contract to go into effect at once.

Yours very truly,

(Signed) ARTHUR B. LISLE, General Manager."

(Exhibit 4)

"R. I. P. U. C. No. 68

## NARRAGANSETT ELECTRIC LIGHTING COMPANY

EXHIBIT

SPECIAL RATE TO THE ATTLEBORO #6
STEAM AND ELECTRIC COMPANY

#### CHARACTER OF SERVICE

22,000 volt, 3 phase, 60 cycle alternating current delivered at the state line between the town of East Providence, Rhode Island and the Town of Seekonk, Massachusetts.

1166

#### CONDITIONS

Transmission lines outside the State of Rhode Island to be furnished by foreign corporations for an annual payment of fifteen per cent. (15%) of their cost.

#### RATE

8.57 mills per kilowatt hour as registered by the meters installed in the sub-station of the Attleboro Steam and Electric Company.

The Narragansett Company to pay \$1,750.00 per year for operation of the receiving sub-station.

1167

Above price to be subject to increase or decrease for fluctuations in the cost of coal above or below \$3.50 per long ton alongside the Narragansett Electric Lighting Company's station; 1168

1169

## Decision and Order of Commission

also to increase or decrease to cover increase or decrease in regular or special taxes or new taxes.

### TERM OF CONTRACT

Twenty (20) years and thereafter unless discontinued by either party.

Effective"

(Exhibit 6)

The Commission after a presentation of the matter by officers of the Narragansett Company, and acting under the authority of the Public Utilities Act, P. L. 795, Sec. 42, sub-section ., entered the following order:

"On application of the Narragansett Electric Lighting Company for authority to grant a special rate, upon consideration, it is Ordered: That, for good cause shown, said Narragansett Electric Lighting Company be, and it is hereby authorized to grant a special resale rate to the Attleboro Steam and Electric Company at the State Line between Rhode Island and Massachusetts, said rate to be shown in the tariff of said Narragansett Electric Lighting Company, R. I. P. U. C. No. 68, filed with and made a part of said application."

1170

Public Utilities Commission, Order No. 335, dated May 23, 1917.

On April 6, 1921, the Commission was in receipt of a communication from the Narragansett Company, as follows:

# "NARRAGANSETT ELECTRIC LIGHTING COMPANY

EXECUTIVE OFFICES

TURKS HEAD BUILDING

PROVIDENCE, R. I.

Public Utilities Commission, State of Rhode Island.

Gentlemen:

We are filing herewith R. I. P. U. C. No. 101, cancelling R. I. P. U. C. No. 68 for the purpose of increasing the rate paid by the Attleboro Steam and Electric Company for electricity.

We respectfully request that you waive the statutory notice and allow this rate to become effective on all electricity billed on and after April 1, 1921.

Very truly yours,

(Signed) E. A. BARROWS,

President.

STAMPED

RECEIVED

April 6, 1921.

PUBLIC UTILITIES COMMISSION

State of Rhode Island

STAMPED

In Regular Session

PUBLIC UTILITIES COMMISSION

April 27, 1921 Consent Granted

Order No. 584

G. A. CARMICHAEL,

(Sgd) George A. Carmichael, Secy. Secretary."

The accompanying schedule, R. I. P. U. C. No. 101, cancelling R. I. P. U. C. No. 68 was as follows:

"R. I. P. U. C. No. 101

Cancelling R. I. P. U. C. No. 68.

1172

1175

1176

# NARRAGANSETT ELECTRIC LIGHTING COMPANY

Special rate to Attleboro Steam & Electric Company

### CHARACTER OF SERVICE

Electricity to be delivered to the Attleboro Company at the East Providence sub-station of the Narragansett Company or at such other point or points as may be mutually agreed upon by the parties at 22,000 or other agreed voltage. Said electricity to be in the form of three phase, sixty cycles, alternating current.

#### CONDITIONS

The Attleboro Company to receive electricity at said East Providence Sub-Station and to bear all expense of transmitting the electricity thus received.

#### RATE

- (a) A service charge of such amount as will equal the cost to the Narragansett Company of taxes, insurance, depreciation, obsolescence and any other fixed charges and net the Narragansett Company an eight per cent dividend upon that portion of the cost of the plant which can properly be allocated to the generation of electricity for and the delivery of such electricity to the Attleboro Company.
- (b) A charge per kilowatt hour for all electricity delivered which shall be equal to the cost per kilowatt hour to the Narragansett Company of generating and delivering such electricity to the Attle-

boro Company at said point of delivery plus a fixed addition thereto of 1 mill per kilowatt hour.

(c) A charge equal to any and all taxes paid by the Narragansett Company on account of or having relation to the electricity generated for or sold or delivered to the Attleboro Company or any payments receivable or received by the Narragansett Company therefor, including the payment received as a service charge or otherwise incidental to or arising out of the service rendered or to be rendered by the Narragansett Company to the Attleboro Company.

1178

DISCOUNTS

The above rate is net.

TERM OF CONTRACT

April 1, 1921 to April 1, 1938.

Effective on all electricity billed on and after April 1, 1921.

(Stamped)
RECEIVED
April 6, 1921
Public Utilities Commission
State of Rhode Island."

1179

(Signed) GEORGE A. CARMICHAEL, Secretary. The Commission thereafter held an informal conference with representatives of the Narragansett and the Attleboro companies and upon the failure of these companies to arrive at a mutually satisfactory agreement, entered the following order:

"PUBLIC UTILITIES COMMISSION OF RHODE ISLAND.

Petition of Narragansett Electric Lighting Company filed with accompanying schedules on the sixth day of April, A. D. 1921 requesting waiver of statutory thirty days' notice upon a certain rate schedule R. I. P. U. C. Number 101, cancelling R. I. P. U. C. Number 68, for the purpose of increasing the rate paid by the Attleboro Steam and Electric Company for electricity considered on the sixth day of April A. D. 1921 at an informal hearing at which representatives of both companies were in attendance and heard.

It appearing that a continuance of the operation of the terms of the rate contract between said companies would result in a loss to the petitioning company and would, therefore, discriminate against its other consumers, and action upon said petition having been deferred by the Commission in order that said companies might continue negotiations for the purpose of arriving at a mutually satisfactory and equitable modification of said rate contract.

It now appearing that such negotiations have been without result.

Upon consideration, it is

1181

ORDERED: That, for good cause shown, said Narragansett Electric Lighting Company be and it hereby is authorized to put into effect without the statutory publication and notice to the Commission, tariff R. I. P. U. C. Number 101, cancelling R. I. P. U. C. Number 68, for the purpose of increasing the rate paid by the Attleboro Steam and Electric Company for electricity.

April 27, 1921.

No. 584.

(Signed) GEORGE A. CARMICHAEL, Secretary."

1184

In subsequent proceedings before the District Court of the United States the legality of said rate schedule No. 101, and the order of the Commission thereon, was denied. (Attleboro Steam and Electric Company v. Narragansett Electric Lighting Co., 295 Fed. 895 (Dist. of Rhode Island 1924).

Thereafter on May 7, 1924, the Narragansett Company filed with the Commission a schedule R. I. P. U. C. No. 125, cancelling R. I. P. U. C. Nos. 68 and 101, called Electric Lighting Company Rate "N", applicable by its terms to all public utilities which now purchase or may hereafter purchase electrical energy beyond a certain minimum amount, which schedule follows:

1185

"R. I. P. U. C. No. 125
Cancelling R. I. P. U. C. Nos. 60 & 101
EXHIBIT
No. 3.
Docket No. 114.

1186

Decision and Order of Commission

# NARRAGANSETT ELECTRIC LIGHTING COMPANY.

ELECTRIC LIGHTING CO. RATE N.

### CHARACTER OF SERVICE

Electricity will be supplied under this rate to Electric Lighting Companies for use by them or for sale to their customers. Such electricity will be delivered in the form of 3 phase, 60 cycle, alternating current at the voltage at which it is transmitted to the point of delivery, which point of delivery shall be such location as may be mutually agreed upon provided, however, that in all cases where the customer is located without the State of Rhode Island, such location shall be at the Rhode Island State Line. Meters for registering the current delivered and for the determination of the maximum taking shall be located at the point of delivery, unless some other location may be mutually agreed to, in which case the necessary adjustment shall be made in the meter readings to ascertain the current delivered and the maximum taking as of the point of delivery.

RATE

1188

1187

Demand in Kilowatts 3,000 or over Annual Investment Charge Per Kilowatt of Demand \$19.00

Electricity Charge Per Kilowatt Hour 8 mills

# TERM OF CONTRACT

One year or over.

### BILLS

Bills shall be rendered monthly for one-twelfth part of the annual investment charge and for electricity delivered during the previous month and shall be due and payable within fifteen days of rendition.

STANDARD CONTRACT RIPERS AND TERMS AND CON-DITIONS

The Company's Standard Contract Riders and Terms and Conditions on file from time to time with the Public Utilities Commission, where not inconsistent herewith or otherwise mutually agreed, are made a part hereof.

> Effective on all electricity delivered after 12 o'clock midnight June 14, 1924."

1190

The Narragansett Company in its letter accompanying the filing of said Schedule No. 125, requested that the Commission, "upon its own motion, hold a public heaving, make full investigation, and if (the) Commission finds that the rate R. I. P. U. C. No. 68 is unjust, unreasonable, insufficient or unjustly discriminatory, or to be preferential or otherwise in violation of the (public utilities) act, order this rate superseded by the new general rate for public utilities filed herewith, if (the) Commission finds that this rate is just and reasonable; or by such other rate as (the) Commission shall find to be just and reasonable \* \* \* \*".

1191

Thereafter the Commission instituted the present proceedings.

The evidence submitted upon the part of the Narragansett Company, through the testimony and exhibits of Jesse E. Gray, assistant secretary, in

# Decision and Order of Commission

charge of rate schedules, and contracts and contractual relations with customers, indicates the past, present and future results of the operation of rate Schedule No. 68, and the contract with the Attleboro Company upon which it is based, as follows:

"Loss to N. E. L. Co. Through Selling Electricity Under R. I. P. U. C. #68.

|      |    |      |      | K.W.H.<br>Measured<br>at East<br>Providence | Unit<br>Generating<br>and De-<br>livery Cost | Total Gen-<br>erating and<br>Delivery Cost | Total<br>Capital<br>Cost |
|------|----|------|------|---|--|--|--------------------------|
| 1193 | (9 | Mo.) | 1918 | 3,224,946                                   | \$.0116998                                   | \$37,731.40                                | \$37,207.67              |
|      |    |      | 1919 | 5,069,860                                   | .0117977                                     | 59,706,74                                  | 43,672.50                |
|      |    |      | 1920 | 5,929,570                                   | .0116329                                     | 63,978,36                                  | 48,998.05                |
|      |    |      | 1921 | 5,767,848                                   | .00988456                                    | 56,012.60                                  | 58,438.12                |
|      |    |      | 1922 | 7,411,960                                   | .0079967                                     | 59,271,23                                  | 72,090.17                |
|      |    |      | 1923 | 10,171,600                                  | .0075348                                     | 76,640,90                                  | 66,111.78                |
|      |    |      | 1924 | 10,800,000                                  | .0077798                                     | 84,021.84                                  | 70,437.08                |
|      |    |      | 1925 | 11,890,800                                  | .0059444                                     | 70,726.47                                  | 77,573.02                |
|      |    |      | 1926 | 13,091,771                                  | 44   | 77,822.72                                  | 85,405.52                |
|      |    |      | 1927 | 14,414,040                                  | 41   | 85,682.82                                  | 94,026.79                |
|      |    |      | 1928 | 15,869,858                                  | 64   | 94,336.78                                  | 103,528.51               |
|      |    |      | 1929 | 17,472,714                                  | 44   | 103,864.80                                 | 113,984.09               |
|      |    |      | 1930 | 19,237,458                                  | 41   | 114,355.15                                 | 125,485.22               |
|      |    |      | 1931 | 21,180,441                                  | 44   | 125,968.61                                 | 138,160.31               |
|      |    |      | 1932 | 23,319,666                                  | 64   | 138,621.42                                 | 152,119.42               |
|      |    |      | 1933 | 25,674,952                                  | 44   | 152,622.18                                 | 167,490,94               |
|      |    |      | 1934 | 28,268,122                                  | 44   | 168,037.02                                 | 184,404.68               |
|      |    |      | 1935 | 31,123,202                                  | 64   | 185,008.76                                 | 203,021.55               |
|      |    |      | 1936 | 34,266,645                                  | 44   | 203,694.64                                 | 223,529,05               |
|      |    |      | 1937 | 37,727,576                                  | 44   | 224,267.80                                 | 246,109.50               |

\$2,187,372.24 \$2,311,793.97

# Decision and Order of Commission

1195

|              | Total<br>Cost of<br>Supplying<br>Service | Net Receipts<br>From Attleboro<br>Co. Under<br>R.I.P.U.C. #68 | Under R.I.      |    |
|--------------|--|---|-----------------|----|
| (9 Mo.) 1918 | \$74,939.07                              | \$36,158.03   | \$38,781.04     |    |
| 1919         | 103,379.24                               | 54,643.64   | 48,735.60       |    |
| 1920         | 117,976.41                               | 76,582.02   | 41,394.39       |    |
| 1921         | 114,450.72                               | 60,598.24   | 53,852.48       |    |
| 1922         | 131,361.40                               | 70,013.33   | 61,348.07       |    |
| 1923         | 142,752.68                               | 97,141.35   | 45,611.33       |    |
| 1924         | 154,458.92                               | 103,540.55  | 50,918.37       |    |
| 1925         | 148,299.49                               | 97,729.29   | 50,570.20       |    |
| 1926         | 163,228.24                               | 108,250.52  | 54,977.72       |    |
| 1927         | 179,709.61                               | 119,834.39  | 59,875.22       |    |
| 1928         | 197,865.29                               | 132,588.23  | 65,277.06       |    |
| 1929         | 217,848.89                               | 146,630.21  | 71,218.68       |    |
| 1930         | 239,840.37                               | 162,090.43  | 77,749.94       |    |
| 1931         | 264,128.92                               | 179,112,12  | 85,016.80       |    |
| 1932         | 290,740.84                               | 197,853.01  | 92,887.83       |    |
| 1933         | 320,113.12                               | 218,486.73  | 101,626.39      |    |
| 1934         | 352,441.70                               | 241,204.46  | 111,237.24      | 11 |
| 1935         | 388,030.31                               | 266,216.67  | 121,813.64      |    |
| 1936         | 427,223.69                               | 293,755.12  | 133,468.57      |    |
| 1937         | 470,377.30                               | 324,074.96  | 146,302.34      |    |
|              | \$4,499,166.21                           | \$2,986,503.30  | \$1,512,662.91" |    |

1196

The Commission is satisfied that the method used and principles applied in the determination of costs as set forth in Exhibit 10 are correct; that upon the evidence before the Commission, it appears that the loss to the Narragansett Company resulting from the supply of electric energy to the Attlebero Company under Schedule #68, including a return of eight per cent. upon that part of its investment used in rendering such service, has been for the years 1918 to 1923 inclusive as follows:

| <b>*</b> 1918 | (9 | months)—\$29.479.12 | 1921-\$53,842.48 |
|---------------|----|---------------------|------------------|
| 1919          | •  | - 48,735.60         | 1922- 61,348.07  |
| 1920          |    | - 41,394.39         | 1923-45,611.33   |

<sup>\*(</sup>See letter Mr. Gray, July 10, 1924, correcting Exhibit 10.)

1199

# (Exhibit 20)

The Commission further finds upon the evidence, that the aggregate loss to the Narragansett Company from serving the Attleboro Company for the term of the contract under the contract rate and Schedule 68, after a return of 8% on the investment devoted to such Attleboro Company service will be not less than \$1,500,000.00.

# (Exhibit 10)

The evidence further shows and the Commission finds that the method used and the principles applied in the determination of allocation of plant to the Attleboro service, the receipts from such service, the operating costs thereof, and the net financial results from the service rendered the Attleboro Company, are correct, as set forth in Exhibit 2, and the testimony of Mr. Gray, and that the result of such operation for the year 1923, shows that the Narragansett Company suffered an operating loss of not less than \$4,326.03, without any return whatever upon the investment devoted to such service. It also appears that the probable operating loss during the year 1924 to the Narragansett Company is not less than \$6,881.95, before any return upon investment.

1200

(Exhibit 2 and testimony J. E. Gray, pp. 80-82.)

The evidence further shows that the estimated annual net losses to the Narragansett Company for service under Schedule #68 after an 8% return on capital, for the remaining years of the contract, are as follows:

# Decision and Order of Commission

1201

| 1924-\$50,918.37 | 1931-\$ 85,016.80 |
|------------------|-------------------|
| 1925— 50,570.20  | 1932— 92,887.83   |
| 1926— 54,977.72  | 1933— 101,626.39  |
| 1927 - 59,875.22 | 1934— 111,237.24  |
| 1928— 65,277.06  | 1935— 121,813.64  |
| 1929— 71,218.68  | 1936— 133,468.57  |
| 1930— 77,749.94  | 1937— 146,302.34  |

### (Exhibit 10)

The contract of 1917 was entered into at the solicitation of the Narragansett Company which expressly stated that it estimated that the profit from the sale of current to the Attleboro Company would be somewhat lower during the earlier years of the contract and somewhat higher during the later years than the average profit which the company believed itself entitled to.

1202

# (Exhibit 4-p. 2.)

At the time the contract was entered into the Attleboro Company was producing its supply of electric energy at its generating plant in Attleboro, and dismantled its plant after the supply of electric energy from the Narragansett Company became available. The evidence does not show to what extent said plant was adapted to the further demands thereon, or its generating costs as compared with similar costs under the contract and Schedule 68 based thereon.

1203

Rate Schedule R. I. P. U. C. No. 68 of the Narragansett Company, which is based upon the contract of 1917, was approved by this Commission under the authority of the following statute:

"Sec. 42. The provisions of sections thirty-nine, forty and forty-one (unjust discrimination, discrim-

inations and undue preference, and rebates, consessions and discriminations) of this act shall be subject to the following exceptions:

"(b) With the approval of the Commission any public utility may give free transportation or service, upon such conditions as such public utility may impose, or grant special rates therefor to the State, to any town or city, or to any water or fire district, and to the officers thereof, for public purposes, and also to any special class or classes of persons, not otherwise referred to in this section, in cases where the same shall seem to the Commission just and reasonable, or required in the interests of the public, and not unjustly discriminatory."

(P.L. Ch. 795, Sec. 42, Sub-section (b).)

The Commission has always construed such approval as authority for the utility to render service to a consumer of a special class at the rate contained in the schedule approved and under the terms of the contract, until further order of the Commission.

We do not believe that it is the intent of the law that the approval of the Commission should preclude the Commission from further jurisdiction over such a rate in the public interest.

If such is the intent of the law, the Commission would feel that such authority should be little, if ever, exercised.

In this particular case it appeared to the Commission at the time the schedule was submitted for approval that the supply of electric energy by the Narragansett Company to the Attleboro Company under the contract and schedule was to the mutual

1205

benefit of both companies, offering to the former a large consumer at an average profitable rate during the terms of the contract, and to the latter a dependable supply of energy at a cost which the latter company must have considered lower than its own cost would be under independent operation. The other consumers could also anticipate a lowered cost of production to the Narragansett Company by reason of the increased load upon the central station.

The principal reason for the loss to which the Narragansett Company is subjected with reference to this rate schedule and contract is due to the sudden, substantial and permanent increase in its average unit cost of generating plant, due to the increased costs which have followed the change of conditions resulting from the world war.

1208

The testimony of Mr Gray shows that he assumed plant unit costs of \$45.00 to \$50.00 per kilowatt hour of peak primary load, as a basis in estimating how the contract would operate as to the Narragansett Company, and that the trend of unit cost in that company and all steam generating stations had shown the previous five years a gradual tendency downward.

(Testimony Gray, pp. 83 and 120.)

It further appears that the actual unit costs of the Narragansett Company were as follows:

| 1918 | \$77.53 | (Apr. to Dec.) | 1922 | \$109.33      |
|------|---------|----------------|------|---------------|
| 1919 | 81.46   |                | 1923 | 88.81         |
| 1920 | 81.05   |                | 1924 | 89.15 (est'd) |
| 1921 | 108 70  |                |      |               |

1211

1212

(Exh. 10, pages 13-19)

The evidence shows that there is no present reason to anticipate any reduction in such unit costs.

After a careful consideration of all the evidence the Commission is of the opinion and therefore finds that the rates contained in schedule R. I. P. U. C. No. 68 are unjust, unreasonable, insufficient and unjustly discriminatory and preferential and otherwise in violation of the provisions of the Public Utilities Act in that the said rates, tolls and charges yield no return on the value of the property used by the Narragansett Company in rendering service to the Attleboro Company, while the rates, tolls and charges charged by the Narragansett Company to its other customers yield a fair return on the value of the property used for such service.

The Commission further finds that a continuance of service to the Attleboro Company under said schedule No. 68 will be detrimental to the general public welfare, and will prevent the Narragansett Company from performing its full duty towards its other customers.

The Commission having found that the rates contained in Schedule No. 68 are unjust, unreasonable, insufficient and unjustly discriminatory and preferential, and otherwise in violation of the Public Utilities Act, it is within the power and becomes the duty of the Commission to fix and order substituted for such existing rates, tolls and charges, such rates, tolls and charges as shall be just and reasonable.

(P. L. 1923, Ch. 253, Sec. 22 (3685).)

The Narragansett Company filed its schedule R. I. P. U. C. No. 125, and has presented evidence to show that the same is just and reasonable.

The basis for said schedule is fully explained in Exhibit No. 1, as follows:

"BASIS FOR SCHEDULE R. I. P. U. C. No. 125 Exhibit #1

On the accompanying sheet entitled "Generating Plant" Data will be found the following:

1214

- (a) The Book Value of the "Generating Plant". The "Generating Plant" in this case means the present generating station of the Narragansett Company, the coal and oil handling apparatus and equipment located at such generating station, and the land allocated to such property. It does not mean the 66,000 volt sub-station, the 22,000 volt substation or land allocated to such sub-stations.
- (b) The reserve for Depreciation applicable to the "Generating Plant".
- (c) The Depreciated Book Value of the "Generating Plant".
- (d) The Peak Primary Load on the "Generating Plant".
  - (e) The Unit Cost of the "Generating Plant".

The Book Value of the "Generating Plant" contains the book value of the "Generating Plant" as

of the first day of each month. The values for the first two months are those shown on our books, plus storehouse and office building land. This land, although used in conjunction with our generating station, was not carried on our books as a part of our "Generating Plant" until March 31st March 1st we have added to the value determined as above for February 1st, \$758,000 on account of the new switchhouse; for June 1st, \$125,000 was added to the previous month's value on account of the switchhouse; for December 1st, \$1,050,000 was added to the previous month's value on account of a new boiler house extension. On the first of each month from and including March 1st, \$2,250 was added to the previous month's value. This is estimated to cover the ordinary miscellaneous small additions to our "Generating Plant".

The Reserve for Depreciation is that part of the Reserve for Depreciation carried on our books in respect to the generating and delivery plant which we feel is applicable to the "Generating Plant", the book value of which are set forth in the first column and is arrived at in the following manner:

For the first three months we use such part of the reserve herein mentioned as is equal to the ratio between the total book value of our generating and delivery plant and the book values of our "Generating Plant" as set forth in column 1. The reserve for each succeeding month is established by adding to the reserve for the first day of the preceding month one-twelfth part of 3 percentum of the depreciated value of the "Generating Plant" for the first day of the preceding month.

1218

The Depreciated Book Value of the "Generating Plant", is arrived at by deducting the Reserve for Depreciation contained in the second column from the Book Values of the "Generating Plant" contained in the first column.

The peak primary load is the maximum fifteen minute peak of primary power measured at the East Providence, Admiral Street, Elmwood and Elm Street Sub-Stations as to all electricity which passes through such sub-stations and at the "Generating Plant" as to all electricity which does not pass through such sub-stations. In preparing these figures we have assumed that there will be no increase in the primary load after March 1st until some time in December, possibly between the 15th and 25th.

1220

The unit cost of the "Generating Plant" is obtained by dividing the depreciated book value of the "Generating Plant" by the peak primary load.

The average unit cost of the "Generating Plant" for the year obtained by dividing the sum of the unit cost for each month by twelve, is \$89.15. Multiplying this figure by 13½%, covering an 8% return, 3% depreciation and 2½% for taxes and insurance not including, however, any Federal or State taxes, equals \$11.81, which divided by 95.5%, to cover losses from the sub-station to the point of delivery at the State Line, equals \$12.37, this sum being that part of the annual investment charge necessary to cover the return, depreciation and taxes herein set forth on the Depreciated Book Value of the "Generating Plant".

### "GENERATING PLANT" DATA

| 1924      |     | Book Value<br>of "Generat-<br>ing Plant" | Reserve for<br>Depreciation | Depreciated<br>Book Value<br>of "Generat-<br>ing Plant" | Peak<br>Primary<br>Load | Un    |
|-----------|-----|--|-----------------------------|---|-------------------------|-------|
| January   | 1st | \$5,699,317.47                           | \$693,401.68                | \$5,005,915.79  | 63,970 KW               | \$78. |
| February  | 1st | 5,719,572.96                             | 705,265.38                  | 5,014,307.58  | 63,970 "                | 78.   |
| March     | 1st | 6,479,822.96                             | 716,804.05                  | 5,763,018.91  | 64,615 "                | 89.   |
| April     | 1st | 6,482,072.96                             | 731,211.60                  | 5,750,861.36  | 64,615 "                | 89.   |
| May       | 1st | 6,484,322.96                             | 745,588.75                  | 5,738,734.21  | 64,615 "                | 88.   |
| June      | 1st | 6,611,572.96                             | 759,935.59                  | 5,851,637.37  | 64,615 "                | 90.   |
| July      | 1st | 6,613,822.96                             | 774,564.68                  | 5,839,258.28  | 64,615 "                | 90.   |
| August    | 1st | 6,616,072.96                             | 789,162.83                  | 5,826,910.13  | 64,615 "                | 90.   |
| September | 1st | 6,618,322.96                             | 803,730.11                  | 5,814,592.85  | 64,615 "                | 89    |
| October   | 1st | 6,620,572.96                             | 818,266.59                  | 5,802,306.37  | 64,615 "                | 89    |
| November  | 1st | 6,622,822.96                             | 832,772.36                  | 5,790,050.60  | 64,615 "                | 89.   |
| December  | 1st | 7,675,072.96                             | 847,247.49                  | 6,827,825.47  | 64,615 "                | 105   |

1223

Average Unit Cost \$89.15 \$89.15 times 131/4% equals \$11.81 \$11.81 divided by 95.5% equals \$12.37

In ascertaining that part of our annual investment charge having relation to the transformatic and transmission of electricity it seems desirable give particular attention to the investment in transformation and transmission equipment and appartus necessary or useful in respect to the electricity to be delivered to the Attleboro Steam & Electricity to the accompanying data, therefore is in relation to the supply of electricity to such Companying that it is not company to the supply of electricity to such Companying data.

Electricity for the Attleboro Company is generated at 11,000 volts and transformed from such voltage to 22,000 volts by means of transformers located near the "Generating Plant". Such electricity then transmitted to the East Providence Sub-Station by means of underground cables, thence hunderground cables to a riser approximately 1,6" feet from such sub-station, and from such riser laerial line to a point on the State Line between

Rhode Island and Massachusetts where such aerial line crosses the State Line. From such point on the State Line electricity is transmitted over lines owned by the Seekonk Electric Company and the Attleboro Steam & Electric Company to a location near the generating plant of the Attleboro Company.

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Electricity is transformed before transmission to the East Providence Sub-Station by means of 3-5, 000 K. V. A. transformers located near the "Generating Plant" and is transmitted to such sub-station by means of five cables which require approximately 60,975 feet of duct. The values of these transformers, cables and ducts are shown on the sheet entitled "Transformation and Transmission Data".

1226

The cost of the aerial line is arrived at by taking the total cost of the line from the sub-station to the vicinity of the Attleboro Company's generating station and deducting therefrom the amounts paid by the Attleboro Steam & Electric Company and the Seekonk Electric Company for that portion of the line lying in their respective territories.

The value of the transformers, cables and ducts is decreased 12.16% to allow for depreciation, such percentage decrease in value being arrived at by dividing the Reserve for Depreciation for January 1st as shown on the sheet entitled "Generating Plant" Data by the Book Value of the "Generating Plant" at the same date.

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The sub-station values are those shown on our books as of March 1, 1924. For the purpose of the present calculations such values are decreased by the value of the land, building and equipment chargeable to street lighting and further decreased

to allow for depreciation by the same percentage used in depreciating the cables, transformers and ducts.

The depreciated value of the transformers, cables and ducts would thus amount to \$150,752.82 and that of the sub-station building, land and equipment minus any portion chargeable to street lighting, \$103,512.53. The estimated load at this substation is 13,000 kilowatts of which 220 kilowatts is chargeable to street lighting. In arriving at the investment per kilowatt in transformers, cables and ducts we have divided the total investment in such property by 13,000. In arriving at the investment per kilowatt in sub-stations land, structure and equipment, we have divided the investment in such property by 12,780. The kilowatt cost of transformers, cables and ducts thus amounts to \$11.60 and of sub-station land, structure and equipment, \$8.10. These amounts multiplied by 131/4% total \$2.61, which divided by 95.5% to cover drop between the sub-station and the point of delivery equals \$2.73, this sum being that part of the annual investment charge necessary to cover an 8% return, depreciation and taxes not including, however, any Federal or State taxes on the depreciated book value of transformers, cables, ducts and substation land, structure and equipment as herein set forth.

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The value of the aerial line determined in the manner set forth above is \$73,886.23. This value is depreciated by taking a proportionate part of a reserve covering transmission and distribution lines and other equipment equal to the ratio between \$73,886.23 and the value of such transmission and

distribution lines and other equipment. This part of such reserve is equal to \$10,221.84. Deducting this from the book value of the line we obtain a net depreciated value of \$63,664.39, which divided by the Attleboro Company's peak load; namely, 3,840 kilowatts measured at the East Providence Sub-Station, gives a kilowatt cost of \$16.58. This multiplied by 15% to cover an 8% return, depreciation, taxes and maintenance, equals \$2.49 which divided by 95.5% to cover loss between the substation and the point of delivery, equals \$2.61, this sum being that part of the annual investment charge necessary to cover such return, depreciation and taxes not including, however, any Federal or State taxes on the depreciated book value of the transmission line from the East Providence Sub-Station to the point of delivery at the State Line, as herein set forth and to provide for the maintenance of such line.

# Decision and Order of Commission

# TRANSFORMATION AND TRANSMISSION DATA

| 3-5,000 K.V.A. Transformers X 1621<br>X 1586  | \$16,230.84   |
|---|---|
| 5—Cables X 1500<br>X 1514<br>X 1586<br>X 1621<br>X 2540<br>Duct—60,975 feet @ 50c                         | 25,378.95<br>14,902.03<br>43,519.91<br>22,687.65<br>18,415.18<br>30,487.50  |
| Dep.  | \$171,622.06<br>20,869.24 \$150,752.82 divided by 13,000 equals<br>\$11.60 times 13\% equals \$1.54                         |
| Sub-Station, East Providence<br>Land, Book Value 3/1/24<br>Structure, Book Value 3/1/24<br>Equipment, " " | \$1,793.15<br>28,487.58<br>104,447.92   |
| Less Street Lighting, Land, Build-<br>ing & Equipment   | \$134,728.65<br>16,886.52   |
| Dep.  | \$117.842.13<br>14,329.60 \$103,512.53 divided by 12,780 equals<br>\$8.10 times 13¼% — 1.07                                 |
| Estimated Total Load 13,000 K.W. Street Lighting Demand 220 "   | \$2.61 divided by $95.5\% = $2.73$  |
| Attleboro Load 3,840 K.W. Transmission Line X 1595, N. E. L. Co. share only Dep.                          | \$73,886.23<br>10,221.84  |
|   | 63,664.39 divided by 3,840 K.W. equals \$16.58 per KW \$16.58 times 15% equals \$2.49 \$2.49 divided by 95.5% equals \$2.61 |

The foregoing data shows the necessity of including in the annual investment charge per kilowatt of demand the following items:

| On account of generating plant<br>On account of transformers, cables | <b>\$</b> 12.37 |
|--|-----------------|
| and sub-stations   | 2.73            |
| On account of aerial transmission line                               | 2.61            |
| Of the first two items totalling \$15.10                             | \$17.71<br>8 or |

1238

\$9.117 is the amount of the 8% return contained in the investment charge per kilowatt of demand. Of the last item; namely, \$2.61, 8 or \$1.386 is the  $\overline{15}$ 

amount of the 8% return contained in the investment charge per kilowatt of demand. The sum of these two items equals \$10.503. In order that this amount may be left after paying Federal Income Taxes of 12½%, it will be necessary to receive \$1.50 more. This added to the \$17.71 set forth above amounts to \$19.21, which fully justifies the \$19.00 investment charge contained in our Schedule No. 125.

In ascertaining the electricity charge we have computed the cost of generating electricity at our "Generating Plant" and delivering the same to the East Providence, Admiral Street, Elmwood and Elm Street Sub-Stations and dividing the same by the total number of kilowatt hours sent out from the above mentioned sub-stations and from the "Gener-

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ating Plant" as to such electricity as does not pass through any of the above mentioned sub-stations.

Such unit generating and delivery cost is ascer-

tained for each month and there is added thereto one mill to cover such of the general expenses as should be charged to electricity delivered under this schedule and which have not otherwise been given consideration in the schedule as well as to provide for contingencies. The total unit generating and delivery cost thus obtained is multiplied by the number of kilowatt hours delivered to the Attleboro Company each month to obtain the total generating and delivery cost each month of the electricity delivered to the Attleboro Company. The total cost for the twelve months is then divided by the total number of kilowatt hours delivered to the Attleboro Company during the year. These figures are for the calendar year 1923. The generating and delivery cost includes the following:

### Labor

Generating Station Superintendence

Boiler Room, Turbine Room, Electrical & Miscellaneous Labor

Superintendence & Labor at the Admiral Street, East Providence and Elmwood Sub-Station

1242

Superintendence and Labor on lines between the Generating Station and above mentioned sub-stations

#### Fuel

Handling & Storage Charges on Fuel Interest on Fuel Stock Insurance on Fuel Fuel Losses Ash Handling

Water

Lubricants

Supplies & Miscellaneous Expenses at the Generating Station, Admiral Street, Elmwood & East Providence Sub-Stations and for Transmission Lines

Maintenance, Repairs at the Generating Plant and each of the above mentioned sub-stations

Maintenance & Repairs of Transmission Facilities between the Generating Plant and the various sub-stations herein enumerated

Miscellaneous Storehouse Expenses

Purchasing Expense

Accounting Department Expense

Automobile Expense

Liability Insurance

Interest on Invoices paid in advance

Current and Electricity Purchased

The generating and delivery cost of the electricity delivered to the Attleboro Company for the year 1923 ascertained as above set forth is \$.0075348. This divided by 98% to cover the losses between the East Providence Sub-Station and the point of delivery at the State Line gives us a net cost of electricity at such point of delivery of \$.0076886.

It is estimated that fuel during 1924 will cost 7 cents more per barrel than during 1923. This, on the basis of 292 kilowatt hours per barrel of fuel at our generating station, would mean an increase

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124

# Decision and Order of Commission

per kilowatt hour at such generating station of \$.00024, which divided by 95% to cover losses between the generating station and the point of delivery at the State Line, gives us an increase per kilowatt hour of \$.00025 due to increased cost of fuel. This added to the unit cost above set forth, gives a total unit cost at the State line of \$.0079386.

### GENERATING AND DELIVERY COST

|    | 1923      | K.W.H.<br>Delivered | Unit<br>Price | Total<br>Cost |
|----|-----------|---------------------|---------------|---------------|
|    | January   | 934,200             | .0070293      | \$6,566.77    |
|    | February  | 829,100             | .0069171      | 5,734.97      |
| 17 | March     | 872,500             | .9072709      | 6,343.86      |
|    | April     | 794,400             | .0083663      | 6,646.19      |
|    | May       | 795,800             | .0083186      | 6,619.94      |
|    | June      | 733,800             | .0073047      | 5,360.19      |
|    | July      | 704,100             | .0071113      | 5,007.07      |
|    | August    | 758,500             | .0070595      | 5,354.63      |
|    | September | 783,100             | .0074808      | 5,858.21      |
|    | October   | 979,500             | .0075158      | 7,361.73      |
|    | November  | 930,500             | .0075019      | 6,980.52      |
|    | December  | 1,056,100           | .008339       | 8,806.82      |
|    |           | 10,171,600          |               | \$76,640.90   |

\$76,640.90 divided by 10,171,600 equals \$.0075348 \$.0075348 divided by 98% equals \$.0076886 Increase due to fuel, \$.00024 at Generating Sta-

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\$.00024 divided by 95% equals \$.00025 increase at point of delivery

\$.0076886 .00025

**\$**.0079386

The sheet entitled "Details of General Expense for 1923" contains the several accounts of our general expense for 1923. Those items which do not enter into the computations upon which this schedule is based, except through the one mill per kilowatt hour addition to the generating and delivery cost, are designated by an asterisk.

# DETAILS OF GENERAL EXPENSE FOR 1923

|                                 | Co          | ost in Mills |      |
|---------------------------------|-------------|--------------|------|
|                                 | Per F       | WH Sold      |      |
|                                 | This Year   | This Year    |      |
| *Salaries of General Officers   | \$59,493.63 | .181         |      |
| *Directors' Fees                | 4,560.00    | .014         | 1250 |
| Salaries, Acctg. Dept. & Gen. O | f-          |              |      |
| ficers' Clks.                   | 25,706.57   | .078         |      |
| *Stationery & Printing          | 5,665.48    | .017         |      |
| *Postage                        | 2,421.07    | .007         |      |
| *Telephones & Telegrams         | 2,055.42    | .006         |      |
| *Rent                           | 6,787.30    | .021         |      |
| *Sundry Expense in General Offi | ce 3,834.89 | .012         |      |
| *Miscellaneous General Expens   | e 54,528.60 | .166         |      |
| *Law Expense—General            | 8,384.49    |              |      |
| Insurance—Liability             | 11,831.15   | .036         |      |
| Insurance—Fire                  | 8,729.22    | .027         |      |
| Insurance—Use & Occupancy       | 1,351.26    | .004         |      |
| *Insurance—Fidelity             | 208.93      | .001         |      |
| *Taxes—Franchise                | 15,128.66   | .046         |      |
| Taxes—Income, Federal           | 243,208.00  | .739         |      |
| *Taxes—State                    | 47,322.76   | .144         |      |
| Taxes—Town & City               | 189,643.79  | .577         | 1251 |
| *Taxes—Federal Capital Stock    | 20,721.50   | .063         | 1201 |
| Duplicate Electric Charges      | 13,024.15   | .040         |      |
| *Property Damage                | 909.78      | .003         |      |
| Purchasing Dept., Salaries an   | d           |              |      |
| Expense                         | 11,236.15   | .034         |      |
| Storehouse Salaries & Expense   | 57,715.25   |              |      |
| *Repairs, Bldgs., Shop, Store   |             |              |      |
| house & Garage                  | 3,465.52    | .011         |      |

### Decision and Order of Commission

| *Labor & Expense, Heating Plant           | 9,980.67   | .030  |
|---|------------|-------|
| Automobile Expense                        | 43,102.73  | .131  |
| *Uncollectible Accounts                   | 10,127.15  | .031  |
| *Donations & Charities                    | 1,575.00   | .005  |
| *Welfare Work                             | 22,036.13  | .067  |
| *Sick, Injured and Pensioned Em           |            |       |
| ployees                                   | 1,387.98   | .004  |
| *General Advertising                      | 3,639.38   | .011  |
| Total General Expense \$ Electricity Sold | 863,734.31 | 2.626 |
| in K. W. H. 328,889,955                   |            |       |
|   | 285,585.60 | .869  |
|   | 591,172.86 | 1.797 |

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In above totals the credit item "Duplicate Electric Charges" is disregarded."

After a consideration of all the evidence the

Commission finds that the statements set forth in said Exhibit 1 are correct, and that the generating and delivery cost of kilowatt hours delivered to the Attleboro Company in 1923 was .0076885 and such cost for 1924 is no less, and that the annual cost per kilowatt of demand of carrying that part of the generating plant, properly allocable to the service furnished the Attleboro Company in 1924 was \$12.37 and for that part of the investment in transformers, cables, sub-stations so allocable was \$2.73 and for aerial transmission line devoted to such service was \$2.61, making a total cost per kilowatt of demand of \$17.71; that adjusted to the 121/2% Federal Income Tax to ascertain the net return. the amount must be raised to \$19.21, and that upon these facts found by the Commission, the service charge of \$19.00 set forth in Schedule R. I. P. U. C. No. 125 is just and reasonable.

In determining the value of the whole or any part of the investment or property of the Narragansett Company for the purpose of these findings the Commission has considered all relevant facts, including original cost, reproduction cost, money honestly and prudently invested, the par value of securities outstanding, the market value of securities outstanding, the sum required to meet operating expenses, and other facts which are relevant, all of which facts the Commission has, after investigation and hearing and considering all the evidence and arguments of counsel, carefully considered and to each of which it has given due weight.

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The Commission find that under present conditions a return of approximately 8% on the value of the investment devoted to the furnishing of service to the Attleboro Company is a reasonable return, and that considering all the evidence submitted, service by the Narragansett Company under Schedule R. I. P. U. C. No. 125, will yield to the Narragansett Company approximately 8% on the investment devoted by the Narragansett Company to the furnishing of such service.

For all of the reasons hereinbefore stated the Commission finds that the rates contained in Schedule R. I. P. U. C. No. 125, are just, reasonable, sufficient and not unjustly discriminatory or preferential or otherwise in violation of any of the provisions of the Public Utilities Act for the reason that such rates, tolls and charges yield a fair return and no more than a fair return on the value of the property used for such service, and that said rates should be substituted for the rates contained in Schedule R. I. P. U. C. No. 68.

# Decision and Order of Commission

### It is therefore ORDERED:

- (1) That the rates contained in Schedule R. I. P. U. C. No. 68 of the Narragansett Electric Lighting Company, are unjust, unreasonable, insufficient and unjustly discriminatory and preferential and otherwise in violation of the Public Utilities Act. and
- (2) That the rates contained in Schedule R. I. P. U. C. No. 125 of the Narragansett Electric Lighting Company are just and reasonable, and may be allowed to become effective on all electricity delivered on and after February 1, 1925.

1259

Dated this twenty-first day of January, A. D. 1925.

Order No. 876.

PUBLIC UTILITIES COMMISSION OF RHODE ISLAND,

By WILLIAM C. BLISS. SAMUEL E. HUDSON. ROBERT F. RODMAN,

A true copy.

Commissioners.

### Attest:

(Signed) GEORGE A. CARMICHAEL, Secretary.

1260 Service acknowledged this twenty-first day of January, A. D. 1925.

> NARRAGANSETT ELECTRIC LIGHTING Co. By E. A. BARROWS, President.

Service acknowledged this twenty-seventh day of January, A. D. 1925.

> ROBERT G. DODGE. By JOHN M. RAYMOND.

### STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

1261

At the Supreme Court of said State, holden at Providence, within and for said State.

M. P. 436. Attleboro Steam & Electric Company vs. Public Utilities Commission et al.

BE IT REMEMBERED: That on the 2d day of February, A. D. 1925, The Attleboro Steam & Electric Company, a corporation organized under the laws of the Commonwealth of Massachusetts, appealed to this Court and filed and preferred against William C. Bliss, Robert F. Rodman and Samuel E. Hudson constituting the Public Utilities Commission of Rhode Island, and the Narragansett Electric Lighting Company, a corporation organized under the laws of Rhode Island, the following petition, and thereupon a citation was duly ordered, issued and served upon the respondents. Thereafter appearances were entered for the respondents and a motion was filed by said Narragansett Electric Lighting Company that the appeal of the said Attleboro Steam & Electric Company should not operate as a stay of the order appealed from. A motion was also filed by said Narragansett Electric Lighting Company that an interim emergency order be entered providing that said appeal should not operate as a stay of said order appealed from pending final hearing upon the above referred to motion, or until further order of the Court. Thereafter by leave of Court a stipulation in regard to said motion of the Narragansett Electric Lighting Company that the appeal should not operate as a stay was filed. Subsequently, on the first day of May A. D. 1925 said appeal was heard,

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and upon said first day of May A. D. 1925, said motion of the Narragransett Electric Lighting Company that the appeal should not operate as a stay was also heard. Thereafter on the 18th day of June, A. D. 1925, the Court announced its opinion, and upon the 22d day of July, A. D. 1925, said appeal is disposed of by final decree entered by the Court, as hereinafter fully appears:

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

1265

### SUPREME COURT

ATTLEBORO STEAM & ELECTRIC COMPANY, APPELLANT,

v.

PUBLIC UTILITIES COMMISSION and NAR-RAGANSETT ELECTRIC LIGHTING COM-PANY,

RESPONDENTS.

# Claim of Appeal Under Public Utilities Act.

1266

To the Honorable the Justices of the Supreme Court of Rhode Island:

The Attleboro Steam and Electric Company, a corporation organized under the laws of the Com-

monwealth of Massachusetts and having its principal place of business in Attleboro in said Common-

wealth (hereinafter called "the Attleboro Company") brings this petition against William C. Bliss of East Providence in the County of Providence, Robert F. Rodman of North Kingstown in the County of Washington and Samuel E. Hudson of Woonsocket in said County of Providence, constituting the Public Utilities Commission of Rhode Island (hereinafter called "the Commission") and the Narragansett Electric Lighting Company, a corporation organized under the laws of Rhode Island and having its principal place of business in Providence in said County of Providence (hereinafter called "the Narragansett Company") and respectfully represents that it is aggrieved by the order made by the Commission at the solicitation of the Narragansett Company on January 21, 1925, purporting to adjudge that the rates contained in a certain schedule filed on May 14, 1917, with the Commission by the Narragansett Company entitled R. I. P. U. C. No. 68 (said rates being those specified in a contract dated May 8, 1917, between the Attleboro Company and the Narragansett Company and having been approved by the Commission by an order dated May 23, 1917 and designated as No. 335) are unjust, unreasonable, insufficient and unjustly discriminatory and preferential and other-

wise in violation of the Public Utilities Act and that the rates contained in a certain schedule filed

on May 7, 1924, with the Commission by the Narragansett Company entitled R. I. P. U. C. No. 125 are just and reasonable and shall be effective with respect to all electricity delivered on and after February 1, 1925, and further represents that said order is unlawful and unreasonable in the follow-

ing particulars:

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- The Commission, according to the true construction of the Public Utilities Act, had no jurisdiction to make the order in question.
  - 2. Even if the Commission had jurisdiction to make said order, the same is erroneous in that the public interest is not shown to require that the rate specified in said contract of May 8, 1917, and in said schedule R. I. P. U. C. No. 68 be increased or otherwise modified.
  - The rate fixed by the order now in question is unjust, unreasonable and excessive and is calculated to yield to the Narragansett Company more than a fair return with respect to service rendered to the Attleboro Company.

- 4. The rates specified in said contract of May 8, 1917, and in said schedule R. I. P. U. C. No. 68 are not unjust, unreasonable, insufficient, unjustly discriminatory, preferential or otherwise in violation of the Public Utilities Act.
- 5. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, the act is as applied to the present case repugnant to the Constitution of the United States in that it has the effect of improperly interfering with interstate commerce.
- 1272
  6. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, the act is as applied to the present case repugnant to the Constitution of the United States in that it has the effect of depriving the Attleboro Company of the equal protection of the laws.

7. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, the act is as applied to the present case repugnant to the Constitution of the United States in that it has the effect of depriving the Attleboro Company of its property without due process of law.

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8. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, the act is as applied to the present case repugnant to the Constitution of the United States in that it has the effect of impairing the obligation of the contract between the Attleboro Company and the State of Rhode Island implied in the Commission's approval of the rate specified in the abovementioned contract between the Attleboro Company and the Narragansett Company.

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- 9. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, said order constitutes an improper interference with interstate commerce, so that the same is repugnant to the Constitution of the United States.
- 10. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, said order has the effect of depriving the Attleboro Company of the equal protection of the laws, so that the same is repugnant to the Constitution of the United States.

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11. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, said order has the effect of depriving the Attleboro Company of its property without due 1276 process of law, so that the same is repugnant to the Constitution of the United States.

12. If the Public Utilities Act purports to give the Commission jurisdiction to make the order in question, said order has the effect of impairing the obligation of the contract between the Attleboro Company and the State of Rhode Island implied in the Commission's approval of the rate specified in the above-mentioned contract between the Attleboro Company and the Narragansett Company, so that the same is repugnant to the Constitution of the United States.

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The Attleboro Company is advised that it is neither a "public utility" nor a "complainant" within the meaning of Section 34 of the Public Utilities Act, so that it has under said section no right of appeal from said order, and has therefore filed in this court a petition for a writ of certiorari to quash said order. Desiring, however, to preserve whatever rights it may have in the premises, the Attleboro Company, if it has a right of appeal under said section, hereby and within seven days from the service of said order upon it (the same having been so served on January 27, 1925) exercises such right and prays that said order be reversed.

ATTLEBORO STEAM & ELECTRIC COMPANY, by its attorneys,

CURTIS, MATTESON, BOSS & LETTS, STOREY, THORNDIKE, PALMER & DODGE. [Endorsed on the back of the foregoing claim of 1279 appeal.]

M. P. 436. State of Rhode Island and Providence Plantations. Supreme Court. Attleboro Steam & Electric Company, Appellant, v. Public Utilities Commission and Narragansett Electric Lighting Company, Respondents.

Filed Feb. 2, 1925. B. S. Blaisdell, Clerk. Claim of Appeal under Public Utilities Act. Let citation issue returnable February 9, 1925, Citation to Pub. Utilities Com. and Narragansett Electric Lighting Co. Feb. 2, 1925. William H. Sweetland, C. J., for the Court. Curtis, Matteson, Boss & Letts; Storey, Thorndike, Palmer & Dodge.

1925 Filed February 2d and citation issued as ordered reble February 9 at 10 a m. D B Pike asst. ck. Feb. 13 stipulation filed by leave of Court. May 1 heard. May 1 motion of Narragansett Electric Lighting Company that appeal shall not operate as a stay heard. June 18 opinion filed appeal sustained order of the Commission establishing a new rate as per schedule No. 125 reversed and motion of the Narragansett Electric Lighting Company that the appeal shall not act as a stay of the order appealed from denied. July 22 final decree entered.

1282 (L. S.)

THE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS.

Office of the Clerk of the Supreme Court.

To the Sheriffs of our several Counties, or to their Deputies, GREETING:

You are hereby required to notify the Public Utilities Commission of the State of Rhode Island and the Narragansett Electric Lighting Company, a corporation organized under the laws of Rhode Island, having its principal place of business in the City of Providence, in the County of Providence in said State, of the filing in this office of a petition on appeal by the Attleboro Steam and Electric Company, a corporation organized under the laws of the Commonwealth of Massachusetts and having its principal place of business in Attleboro in said Commonwealth, praying that the order made by said Commission on January 21, 1925, be quashed and also to cite the said parties to appear before our Supreme Court, at Providence, in the County of Providence, on the ninth day of February, A. D. 1925, at 10 o'clock A. M., that they may then and there show cause, if any they have why the prayer of said petition should not be granted.

Hereof fail not and make true return of this 1284 Writ with your doings thereon.

WITNESS the Seal of our Supreme Court, at Providence, this second day of February, A. D. 1925.

BERTRAM S. BLAISDELL, Clerk.

1286

I have this 3rd day of February, 1925, at Providence, in said County, made service of the within Citation by leaving an attested copy of the same in the office of the herein named respondent corporation, the Narragansett Electric Lighting Company, in the hands and possession of a clerk there employed.

I have this 4th day of February, 1925, at Providence, in said County, made service of the within Citation by leaving an attested copy of the same in the hands and possession of each member of the Public Utilities Commission, within my precinct.

> BENJAMIN F. STEERE, Deputy Sheriff.

Supreme Court, Feb. 6, A. D. 1925. M. P. No. 436

ATTLEBORO STEAM & EL. CO. vs.

PUBLIC UTILITIES COM. et al.

In the above entitled cause it is agreed that the following entry be made:

I hereby enter my appearance for the respondent, Public Utilities Commission.

> CHARLES P. SISSON, Attorney General.

Filed Feb. 6, 1925. B. S. BLAISDELL, Clerk.

#### SUPREME COURT,

STATE OF RHODE ISLAND, PROVIDENCE PLANTATIONS.

No.

ATLLEBORO STEAM & ELECTRIC COMPANY,
APPELLANT,

28.

PUBLIC UTILITIES COMMISSION and NAR-RAGANSETT ELECTRIC LIGHTING COM-PANY,

1289

RESPONDENTS.

#### Motion.

Now comes the respondent Narragansett Electric Lighting Company, by its attorneys, and moves that the appeal of the said Attleboro Steam & Electric Company in the above entitled cause shall not operate as a stay of that certain order of the said Public Utilities Commission from which said appeal is claimed.

Said respondent respectfully represents that justice and equity require that said appeal shall not operate as a stay of said order for the following reasons:

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1. As will appear from said appeal the appellant therein, hereinafter called the "Attleboro Company," and this respondent, hereinafter called the "Narragansett Company," on May 8, 1917, entered into a written contract for the sale and deliv-

ery over a period of twenty years of electrical energy by the Narragansett Company to the Attleboro company at a rate specified therein. Said rate was thereafter duly approved by the respondent Public Utilities Commission as a Special Rate by order dated May 23, 1917.

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2. At a hearing before said Commission held in April, 1921, it appearing to the satisfaction of said Commission that further operation of said contract would result in a loss to the Narragansett Company and consequently discrimination against its other constants, by order dated April 27, 1921, said Commission authorized a higher rate schedule for electrical energy to be delivered in the future under said contract, superseding the rate approved by said order of May 23, 1917.

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3. By proceedings brought in the District Court of the United States for the District of Rhode Island by said Attleboro Company it was determined by opinion filed February 12, 1924, that said proceedings before said Commission in April, 1921, were not binding upon said Attleboro Company, and accordingly that said Narragansett Company was not entitled to charge and collect the new rates approved therein. Said decision was substantially laid on the ground of technical defects in the proceedings before the Commission and did not amount to a denial of the right of the Narragansett Company to such relief in proper proceedings therefor.

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4. Thereafter on May 7, 1924, said Narragansett Company filed with said Commission a new rate schedule proposed to be charged for electrical energy to be furnished under said contract. There-

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upon of its own motion said Commission instituted a hearing at which the Attleboro Company appeared by counsel, offered testimony, cross-examined witnesses offered by the Narragansett Company and presented a complete argument of its case. The said Commission by order dated January 1, 1925, found that the existing rates are unjust, unreasonable, insufficient and unjustly discriminatory and preferential and otherwise in violation of the Public Utilities Act and authorized an increase in said rates to the extent provided in said schedule filed May 7, 1924, by said Narragansett Company. In the course of its said order said Commission found expressly that Narragansett Company has been in fact furnishing said service for a long period of time at a substantial loss even without taking into consideration any return on the investment of capital devoted to such service and that the probable future loss under said contract will be much greater. It was provided in and by said order that it should be effective on all elec-

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5. Principles of equity and justice require under the above circumstances that said Attleboro Company should not be entitled, in the event that its appeal proves unsuccessful, to profit by reason of having prosecuted said appeal to the extent that the effective date of said order should be deferred thereby until such time as this appeal shall have been decided, particularly since the Narragansett Company for a long time has been, and still is,

tricity delivered on and after February 1, 1925. It is from this order that the present appeal is

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prosecuted.

furnishing electrical energy to the Attleboro Com- 1297 pany under said contract at a heavy loss.

Respectfully submitted,

# NARRAGANSETT ELECTRIC LIGHTING COMPANY,

by E. A. BARROWS, President.

I, EDWIN A. BARROWS, who have signed the foregoing motion in behalf of said Narragansett Electric Lighting Company, being duly sworn on oath depose and say that I have read said motion and know the contents thereof and that the facts therein alleged are true.

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#### EDWIN A. BARROWS.

Subscribed and sworn to before me this 9th day of February, A. D. 1925.

> ARTHUR M. ALLEN, Notary Public.

HINCKLEY, ALLEN, TILLINGHAST & PHILLIPS, ARTHUR M. ALLEN,

Attorneys for Narragansett Company.

[Endorsed on the back of the foregoing motion.] 1299

No. 436 Attleboro Steam & Electric Company, Appellant, vs. Public Utilities Commission and Narragansett Electric Lighting Company, Respondents.

Filed Feb. 9, 1925, D. B. P., asst. ck.

Hinckley, Allen, Tillinghast & Phillips, Law Offices, Turks Head Building, Providence, R. I.

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### SUPREME COURT,

STATE OF RHODE ISLAND

No.

# ATTLEBORO STEAM & ELECTRIC COMPANY, APPELLANT,

vs.

PUBLIC UTILITIES COMMISSION and NAR-RAGANSETT ELECTRIC LIGHTING COM-PANY,

RESPONDENTS.

1301

# Motion for Emergency Order

Respectfully respresents the Narragansett Electric Lighting Company that it has filed a motion in this cause which has been assigned for hearing to March 2, 1925 praying that the appeal of the said Attleboro Steam & Electric Company in the above entitled cause shall not operate as a stay of that certain order of the said Public Utilities Commission from which said appeal is claimed, reference to which said motion is hereby had.

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The Narragansett Electric Lighting Company is advised that under the provisions of Section 35 of the Public Utilities Act of 1912 it is within the power of this Honorable Court to make an order at any time which will prevent said appeal from operating as a stay from February 1, 1925, the date when the Public Utilities Commission ordered that the new rate established by the Public Utilities Commission under their original order should become effective.

Inasmuch, however, as the loss to the Narra- 1303 gansett Company and to its customers would amount to not less than Six Thousand Dollars (\$6,000) per month in case it should be held that an order entered upon March 2, or on some subsequent date, could not relate back to February 1, 1925, and in order to save its rights in the premises, the Narragansett Company respectfully prays that an interim emergency order may be entered by this Court providing that said appeal shall not operate as a stay of said order of the Public Utilities Commission pending the final hearing upon the original motion of said Narragansett Company or until further order of the Court on the ground that justice and equity require that said appeal shall not so operate and for the reasons stated in said original motion.

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# NARRAGANSETT ELECTRIC LIGHTING COMPANY,

By E. A. BARROWS. President.

I, EDWIN A. BARBOWS, President of the Narragansett Electric Lighting Company, being duly sworn on oath do depose and say that I have read the said motion and know the contents thereof and that the facts therein alleged are true.

# EDWIN A. BARROWS.

Subscribed and sworn to before me this 10th day of February, A. D. 1925.

ARTHUR M. ALLEN.

HotaRy Public HINCKLEY, ALLEN, TILLINGHAST & PHILLIPS, Attorneys for Narragansett Electric Lighting Company.

1306 [Endorsed on the back of the foregoing motion.]

M. P. 436. Attleboro Steam & Electric Company, Appellant, vs. Public Utilities Commission and Narragansett Electric Lighting Company, Respondents.

Motion for Emergency Order, Filed Feb. 10, 1925, B. S. Blaisdell, Clerk.

Hinckley, Allen, Tillinghast & Phillips, Attorneys for Narragansett Electric Lighting Company.

Hinckley, Allen, Tillinghast & Phillips, Law Offices, Turks Head Building, Providence, R. I.

## STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

1309

#### SUPREME COURT

ATTLEBORO STEAM & ELECTRIC COMPANY,
APPELIANT,

v.

PUBLIC UTILITIES COMMISSION and NAR-RAGANSETT ELECTRIC LIGHTING COM-PANY,

RESPONDENTS.

1310

# Stipulation.

The Narragansett Electric Lighting Company having filed a motion praying that the appeal of the Attleboro Steam and Electric Company from the order of the Public Utilities Commission shall not operate as a stay of that order, and the Narragansett Electric Lighting Company having agreed that the hearing upon said motion may be delayed until the hearing upon the merits of the said appeal, it is now stipulated that the said motion if allowed by the Court shall be given the same effect as if argued and an order entered thereon on Friday, February 13, 1925 instead of on the day when it shall actually be argued.

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CURTIS, MATTESON, BOSS & LETTS,
ROBERT G. DODGE,
Attorneys for the Appellant.

HINCKLEY, ALLEN, TILLINGHAST & PHILLIPS,

Attorneys for the Respondent, Narragansett Electric Lighting Company. [Endorsed on the back of the foregoing stipulation.]

M. P. 436, Stipulation, Filed by leave of Court, Feb. 13, 1925, B. S. B., Ck.

#### SUPREME COURT.

M. P. No. 435.

ATTLEBORO STEAM & ELECTRIC COMPANY

D.

PUBLIC UTILITIES COMMISSION, et al.

M. P. No. 436.

ATTLEBORO STEAM & ELECTRIC COMPANY

v.

PUBLIC UTILITIES COMMISSION, et al.

## Opinion.

STEARNS, J. These are two preceedings, one by certiorari, the other by appeal from an order of the Public Utilities Commission, brought by the Attleboro Steam & Electric Co. (hereinafter Attleboro Co.), Appellant, being in doubt as to the correct procedure, brought the two proceedings; the same question is raised in each.

The Attleboro Co, seeks to have Order No. 876 made by the Public Utilities Commission (hereinafter the Commission) reversed and declared in-

valid.

The facts, so far as essential to the present inquiry, are as follows: The Attleboro Co. supplies electricity for public and private use in Attleboro,

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Mass. The respondent, Narragansett Electric Lighting Co. (hereinafter Narragansett Co.), a Rhode Island corporation, is engaged in a general electric lighting, heating and power business.

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May 8, 1917 a contract was made by Narragansett Co., party of the first part, with two Massachusetts corporations, Attleboro Co., party of the second part, and Seekonk Electric Company (hereinafter Seekonk Co.) party of the third part. The Narragansett Co. agreed to sell to the Attleboro Co. for a period of twenty years all the electrical energy used by the Attleboro Co. and supplied to its customers in the city of Attleboro; such electrical energy was to be delivered at the State line between Seekonk, Mass., and East Providence, R. I., and to be metered on the transformers of the Attleboro Co. at its generating plant in Attleboro; the Seekonk Co. agreed to secure the necessary rights of way through Seekonk and build therein a transmission line from the point of delivery at the State line to the boundary line between Seekonk and Attleboro and there connect with the transmission line to be built by the Attleboro Co. to connect with its station in Attleboro. The Narragansett Co. agreed to build the transmission line for the Seekonk Co., the latter to pay therefor, however, only the actual cost of material and labor and such other costs as would be considered assets to capitalize by the Massachusetts Board of Gas and Electric Light Commissioners, the cost to the Seekonk Co. in no event to exceed \$4,500 a mile. A similar provision for construction was made with the Attleboro Co. for its transmission line. The Narragansett Co. agreed to pay annually to each of the companies 15% of the amounts paid by each to the Narragansett Co. for such construction, and in ad-

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1318 dition to pay the Seekonk Co. annually 15% of any additional expenditures for additions or changes in its lines. The Attleboro Co. agreed to furnish the necessary transformers, &c., at its station to receive the electric current, and the Narragansett Co. agreed to pay the Attleboro Co. \$1750 annually for the operation by the Attleboro Co. of the receiving The Narragansett Co. agreed to install and maintain as its property and at its expense, meters on the transformers at the station of the Attleboro Co. to measure and determine the amount of current received and to be paid for by said company. The contract price, 8.57 mills per kilowatt hour as registered by such meters, was to be subject to increase or decrease at the rate of .085 mills 1319 per kilowatt hour for every ten cent variation from the base price of \$3.50 per long ton of coal delivered alongside the generating station of the Narragansett Co. on the Providence River. The contract provides for a decrease of price if the electrical energy is produced by cheaper fuel or the cost is less by reason of the use of any subsequent invention or improvement. Any change of federal,

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parties.

The Attleboro Co. agreed to retain and maintain its present generating station and machinery except its present engine driven units, and that the Narragansett Co. at any time at its own expense might use the same for generating and supplying electrical energy to the Attleboro Co.

state, or municipal laws or regulations, changing any existing taxes or imposts which materially increases or decreases the cost to the Narragansett Co. of generating, or delivering electrical energy, was to be equitably adjusted in the price by the The Narragansett Co. guaranteed to the Attleboro Co. that the Seekonk Co. would promptly and properly perform its contract obligations and to indemnify the Attleboro Co. for any loss suffered by it because of any breach of the contract by the Seekonk Co.

May 14, 1917, the Narragansett Co. filed with the Commission schedule No. 68, setting out the rate and general terms of the contract, and an application that said rate be approved as a special rate under Sec. 42, Public Utilities Act (C. 795, P. L. May 23, 1917, the Commission made an order authorizing the Narragansett Co. to grant a special resale rate to the Attleboro Co. at the State line in accordance with schedule No. 68. The parties proceeded to carry out the contract and the Narragansett Co. is still supplying electrical energy to the Attleboro Co. May 7, 1924, the Narragansett Co. filed with the Commission schedule No. 125, setting out a rate for service to the Attleboro Co. materially higher than the rate specified in the contract and schedule No. 68. At the solicitation of the Narragansett Co. the Commission, on its own motion, ordered an investigation and public hearing upon the propriety of the proposed change of rate and directed that notice thereof be given by mail to the two companies. The Attleboro Co. appeared at the hearing and made objection to the jurisdiction of the Commission. This objection was overruled and a hearing was had on the merits of the proposed change. January 21, 1925, the Commission made an order, No. 876, to the effect that the contract rates were insufficient, unjustly discriminatory and in violation of the Public Utilities Act; that the increased rates in schedule No. 125 were just and reasonable and ordered that they

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1324 should become effective February 1, 1925. The Attleboro Co. challenges this order and claims it is unlawful and void on various grounds; the principal and decisive objection, in our judgment, is that said order is an improper interference by the State with interstate commerce.

> The Attleboro Co. is properly here by appeal. Sec. 34. C. 795, provides that any public utility or any complainant aggrieved by any order of the Commission fixing any rate, etc., may appeal to the Supreme Court for a reversal of such order. The Attleboro Co. is not a "public utility" as that term is used in the act (Sec. 2) nor is it strictly a "complainant" in a technical sense, as the original proceeding was begun by the Commission on its own motion (Sec. 26). The Commission by Sec. 28 is required to give notice to such interested parties as the Commission shall deem necessary, as provided in Sec. 20. This latter section requires the Commission to give to "the public utility and the complainant, if any," ten days' notice of the time and place of the hearng. Sec. 28 provides that after notice is given, the procedings shall be conducted in like manner as though complaint had been filed with the Commission relative to the matter investigated. Sec. 58 provides that the provisions of the act shall be interpreted and construed liberally in order to accomplish the purposes thereof. One evident purpose of the statute is to subject any order of the Commission whereby any one is legally aggrieved, to review by the Supreme Court. The Attleboro Co. after appearing at the hearing in response to the notice and thereafter taking part in the proceedings, thereby became a complainant within the meaning of the statute and was vested with all the rights of a complainant including, of

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course, the right of appeal. See P. U. Com. v. Prov. Gas Co., 42 R. I. 1.

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The sale and transportation of electricity generated in one state, and conveyed directly to a purchaser in another state is interstate commerce. It is the essential nature of the service rendered which determines whether commerce is interstate or intrastate; if the actual movement is interstate, it is immaterial that the place of delivery or the place at which title passes, is at the State line. The transportation of the electricity is continuous from this State to its ultimate destination in another state and consequently is interstate commerce. U. S. v. Union Stock Yard, 226 U. S. 286; Penna. R. R. v. Clark Coal Co., 238 U. S. 456; Texas & New Orleans R. R. Co. v. Sabine Tram Co., 227 U. S. 111; United Fuel Gas Co. v. Hallanan, 257 U. S. 277.

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In the recent case (decided May 26, 1924) Missouri v. Kansas Gas Co., 265 U. S. 298, Associate Justice Sutherland, speaking for the court, says the line of division between cases, where, in the absence of congressional action, the State is authorized to act, and those where state action is precluded by mere force of the commerce clause of the Constitution, is not always clearly marked; in the absence of congressional legislation, a State may constitutionally impose taxes and enact laws of internal police generally although they may have an incidental effect upon interstate commerce, but the commerce clause of the Constitution, of its own force, restrains the States from imposing direct burdens upon interstate commerce. The court then quotes with approval the following statement of the law in the Minnesota Rate Cases, 230 U. S. 352, 396: "If a state enactment imposes a direct burden upon interstate commerce, it must fall re-

1330 gardless of Federal legislation. The point of such an objection is not that Congress has acted, but that the State has directly restrained that which in the absence of Federal regulation should be

free."

The Kansas Natural Gas Co. was engaged in producing and buying natural gas and transporting, selling and delivering it from Kansas to Missouri in large quantities to independent distributing companies, which then sold and delivered it to local consumers in numerous communities in Kansas and Missouri. The pipe lines were continuous from the wells to place of delivery. The Gas Co. raised its rates in Missouri without the consent and approval of the Public Utilities Commission of that state and in Kansas, notwithstanding a previous order of the Federal Court fixing a lower rate and the action and approval of the Public Utilities Commission approving and fixing such lower rate. Three cases were consolidated for argument in the Supreme Court: No. 155 was a suit in the Federal Court to enjoin the Kansas Gas Co. from increasing its rates in Missouri without the consent of the Public Utilities Commission of that state. junction was denied in the lower court. This decision was affirmed. In No. 133 the Kansas Supreme Court issued a mandamus to compel the Gas Co. to re-establish and maintain certain rates in Kansas until otherwise ordered by the Public Utilities Commission. This decision was reversed. No. 137 was a suit in a Federal Court in Kansas to enjoin the collection by the Gas Co. of increased rates in Kansas until allowed by the Kansas Utilities Commission. An injunction was denied in the lower court. The decision was affirmed.

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The Supreme Court held that the sale, transportation and delivery were an inseparable part of a transaction fundamentally interstate from beginning to end—not local but essentially national in character—and that enforcement of a selling price in such a transaction placed a direct burden upon such commerce inconsistent with that freedom of interstate trade which it was the purpose of the commerce clause to secure and preserve. The court said (p. 308): "It is as though the Commission stood at the state line and imposed its regulation upon the final step in the process at the moment the interstate commodity entered the State and before it has become a part of the general mass of property therein."

The attempt of a state to fix the rate was held to be invalid because it imposed a direct burden on interstate commerce; and that this could not be done even though there was an absence of any regulation by congress.

The Narragansett Co. seeks to distinguish the Kansas Gas Co. case from the case at bar. urged that as it does an extensive local business in this state, if it loses money on its service to appellant it will be compelled to charge the local public higher rates than would otherwise be reasonable; that one of the principal purposes of the Public Utilities Act is to ensure service at reasonable rates to all customers, and, to enable the Commission to effectually carry out this purpose, it is necessary and proper that the State should be permitted to regulate the service to the appellant; that in the Kansas case the business of the Gas Co. (with an exception not specified) was a wholesale and wholly interstate; as the principal business of the Narragansett Co. is local, the purpose of the

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attempted State regulation is not to regulate interstate commerce but to regulate local service, and that any regulation of interstate commerce is only incidental and indirect, is necessary to properly protect local service and should not be held to invalidate the State regulation. The Narragansett Co., to some extent, relies on the authority of Penna Gas Co. v. Public Service Comm., 252 U. S. 23 (decided in 1920). In that case the Natural Gas Co., a Pennsylvania corporation, transported natural gas from the source of supply in Pennsylvania through its pipe line to certain municipalities in the State of New York and there sold the gas directly to numerous local consumers. This was held to be interstate commerce. The service in New York was held to be local service similar to that furnished by any local gas company and not of the character which requires general and uniform regulation of rates by congressional action; that, although the local rates might affect the interstate business of the company, this fact did not prevent the State of New York through its Public Utilities Commission from making local regulations of rates of a reasonable character.

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ples confirmed therein, we think that the action of the State commission imposes a direct burden on interstate commerce and consequently is invalid. The intrastate and interstate business of the Nar-

The intrastate and interstate business of the Narragansett Co. can be segregated. This separation has actually been made by that company and the Commission, in establishing a basis for the proposed new rate. The effect of the action of the Commission was direct on interstate commerce and in-

The Pennsylvania case was distinguished and limited in its application by the court in the later Kansas Gas Co. case, supra. The case at bar we think is like the Kansas case. Applying the princi-

cidental on local and State commerce. Such being the case there is no difference in principle because of the amount of interstate commerce involved, whether it is much or little, at wholesale or retail. The purpose of the state action is immaterial, if the result is to impose a direct burden on interstate commerce.

The writ of certiorari is dismissed as the Attleboro Co. has a statutory remedy by appeal.

The appeal is sustained, the order of the Commission establishing a new rate as per schedule No. 125 is reversed.

The motion of the Narragansett Co. that the appeal shall not act as a stay (C. 795, S. 35—now G. L. 1923, C. 253, S. 35) of the order appealed from is denied.

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[Endorsed on the back of the foregoing opinion.]

M. P. No. 435. M. P. No. 436. Attleboro Steam & Electric Company v. Public Utilities Commission, et al. Attleboro Steam & Electric Company v. Public Utilities Commission, et al.

Opinion. Filed Jun 18 1925. B. S. Blaisdell, Clerk.

#### STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS,

#### SUPREME COURT,

M. P. No. 436 ATTLEBORO STEAM & ELECTRIC COMPANY

42

PUBLIC UTILITIES COMMISSION, et al.

#### Final Decree.

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The appeal of the Attleboro Steam & Electric Company from the order (No. 876) made by the Public Utilities Commission on January 21, 1925, purporting, among other things, to establish certain rates embodied in a schedule designated as R. I. P. U. C. 125, came on to be heard at this sitting and was argued by counsel and thereupon, upon consideration thereof, the court finds that said order is unlawful and invalid for the reasons stated in the opinion, and it is, therefore,

Ordered, adjudged and decreed that said appeal be sustained, that said order be reversed and that the complaint or notice of investigation upon which said order was entered be dismissed and it is fur-

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Ordered, adjudged and decreed that the motion of the Narragansett Electric Lighting Company that the rate specified in said order take effect notwithstanding said appeal be denied.

Entered as the decree of Court this twenty-second day of July A. D. 1925.

By order

BERTRAM S. BLAISDELL,

Clerk.

[Endorsed on the back of the foregoing decree.] 1345

M. P. 436. Attleboro Steam & Electric Company v. Public Utilities Commission, et al.

Final decree, Filed Jul 22, 1925, B. S. Blaisdell, Clerk.

Curtis, Matteson, Boss & Letts, Attorneys at Law, 415 Woolworth Building, Providence, R. I.

# Certificate of Clerk of Supreme Court of Rhode Island.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS.

1346

Office of the Clerk of the Supreme Court.

I, Bertram S. Blaisdell, Clerk of the Supreme Court of said State, do certify that the foregoing papers are a true transcript of the record in the matter of the cause entitled M. P. No. 436, Attleboro Steam & Electric Company vs. Public Utilities Commission, et al. as appear from the files and records now remaining in this said office of the Clerk of the Supreme Court.

In Testimony whereof I hereto set my hand and affix the seal of said Supreme Court, at Providence, in the County of Providence, in said State, this eighth day of September, A. D. 1925.

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BERTRAM S. BLAISDELL, Clerk.

[SEAL]

Cost of transcript \$12.60 paid by Narragansett Electric Lighting Company.